

BAU KULTUR REPORT

Built Living Spaces of
the Future – Focus City

2014/15



Baukultur Definition

Baukultur aims at good planning and building. It combines a high design standard with a holistic view of social, economic, and environmental aspects, and thus has an emotional and aesthetic dimension. Baukultur is essential to produce an environment that is perceived as liveable. It serves to secure and develop the social and economic values thus created. Producing Baukultur is a social process based on a broad understanding of qualitative values and goals and their implementation with high levels of interdisciplinary expertise. Baukultur is the positive result of a good process culture.

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The Most Important Arguments for Baukultur

Baukultur Is Quality of Life

The better and more sustainably our built environment is designed, the more comfortable we feel in it. The more mixed and diverse the range of uses and facilities, the greater our satisfaction with everyday life in the city.

96% of the population in Germany want good accessibility to infrastructure facilities, and for 92% of the population it is (very) important that buildings, streets, and public open spaces are well maintained and cared for.

Baukultur Creates Community

The design diversity and Baukultur quality of our built environment promote a sense of responsibility and community spirit in our society.

70% of the population in Germany want a vibrant city district as a living environment, and more than half would like to live in a neighbourhood with very different people.

Baukultur with Participation Strengthens Identity and Identification

The more we know about a building and the more substantially we have contributed to its design, the better it meets our needs, the more strongly we identify with it, the better we treat it, and the longer and more sustainably it lasts.

Almost a fourth of the population in Germany does not feel sufficiently informed about local building activities. Nearly a third have noticed offers of participation in the last twelve months.

Baukultur Promotes Accountability

The more carefully public building projects and private investments are designed, planned, and implemented, the more quality we achieve in our built environment. One's own building is not a private matter, but in its emergence and general use is also obligated to the public.

Article 14 of the Basic Law, paragraph 2:
“Property entails responsibility. Its use should also serve the general public”.

Baukultur Is an Investment in the Future

The more that is invested in planning in the beginning, the more cost-effective it will be in the long term. The more suitably future needs and concerns for flexible usability are planned and built, the less that has to be replanned and rebuilt.

The vast majority of social wealth is in property assets and should be secured for future generations. All building activities together make up more than half, 56%, of all investment in Germany.

According to estimates from interviewed industry stakeholders, failure costs account for 12% of total revenue in the construction industry. 69% of the population hold politics primarily responsible for construction delays and associated cost overruns in public building projects.

The Focus Areas of the Baukultur Report 2014/15

Key developments in our society affect planning and building: issues concerning affordable yet high-quality living space in mixed neighbourhoods, the impact of the energy transition, and the planned renovation of our transportation routes. In addition, there are also future challenges, which we already have to face today strategically and structurally – such as demographic development and climate change. Technical innovations and associated changes in perception and values are leaving a mark on our built environment. Core topics deduced from this are housing and the social and functional mix in neighbourhoods, the quality of public space and infrastructure, as well as planning and process quality.

Baukultur as key to success: Baukultur is essential to create an environment that is perceived as liveable. In addition to social, environmental, and economic implications, it also has an emotional and aesthetic dimension. Its production, appropriation, and use are a social process, which is based on a broad understanding of qualitative values and goals. From the viewpoint of many parties involved in this process, the commitment to Baukultur makes sense: private developers can create a basis for maintaining the long-term value or appreciation of their investments. The public sector can contribute to the distinctiveness of our cities with their projects, and thus promote identity locally and nationally. Through initiatives, politicians can absorb the potential for dissatisfaction and divert it to productive paths, and in this way achieve broad support for developments and changes. For everyone, Baukultur is a key to create social and economic added value. Baukultur is an investment in the living spaces of the future.

Housing and Mixed Neighbourhoods

In the next four to five years, probably a million new homes will be built in Germany's growing cities. By 2025, it could be more than three million. It is already conceivable today that it matters what structural quality the new residential buildings have, what they look like, and whether they will still be economically sustainable, and thus marketable, in twenty years. The diverse requirements of neighbourhoods can lead to breaking these mechanical perspectives in favour of integrated Baukultur quality standards. Functionally and socially mixed neighbourhoods are characterised by resource-efficient housing estates. Strengthening them contributes to the reduction of urban sprawl and land use. Mixed neighbourhoods are a central anchor for demographic and social development issues in urban society.

Public Space and Infrastructure

Today, the 21st century is considered the century of cities. Thus, it is at the same time the century of urban public space and urban green space. Given the pending changes in our society, the essential fields of action for the quality of urban life lie here. The large infrastructural challenges – maintenance and renewal of streets, bridges, piping systems, green areas, and bodies of water – challenge city planners, architects, engineers, and landscape architects to work together. With the continual adaptation to current needs, Baukultur offers the chance to correct mistakes from the past and consistently formulate new qualities. Thereby, a basic principle should apply: each investment has to lead to an improvement in the quality of urban life.

Planning Culture and Process Quality

A restrictive and difficult – in terms of communication – planning, participation, and building process often leads to unsatisfactorily designed spaces. The quality of a competently planned, openly communicated, and professionally realised building project is recognisable by its appropriate and enriching design in the cityscape. In the preconceptual phase – the so-called Phase Zero – sufficient resources are granted, and framework conditions, goals, and starting positions are more precisely elaborated. Even if the time necessary increases as a result, the initial diligence minimises later restrictions, additional costs, and conflicts, and ultimately leads to time savings. More than ever before, integrated points of view are necessary to properly determine and coordinate the complex relationships in existing structures. Well-built living spaces can only emerge as the result of good processes.

Recommendations for Action from the Federal Foundation of Baukultur

General

New Approach to Planning and Baukultur

- Organise administrations and project structures interdepartmentally
- Establish a “Phase Zero” and strengthen the base estimates in the planning process
- Regularly implement design competitions for the tendering of planning services and building projects
- Introduce reflection on planning processes as “Phase Ten” for quality assurance

Role Model Function

- Align public and private building projects creatively and functionally forward looking
- Conduct integrated planning for transport construction projects with a stronger consideration of Baukultur and design issues
- Develop high design and process requirements, even in civil engineering
- Resolve large spatial and structural consequences of the energy transition through design

Promotion and Communication of Baukultur

- Emphasise the preservation and cultivation of Baukultur heritage
- Strengthen locations by identifying, promoting, and communicating the national or regional identity
- Include Baukultur criteria in the award of contracts and property
- Expand the award of prizes and plaques to motivate private and public developers

On Individual Stakeholders of Baukultur

The Public Sector: Federal Government

- More consideration of Baukultur criteria in funding instruments, such as urban development promotion
- Experimental clause as a component of support programmes in order to bolster municipalities in Baukultur matters
- Recognition of Baukultur's charitable/non-profit status

The Public Sector: Federal States

- Care of Baukultur heritage
- Promote and improve Baukultur education
- Promote and improve Baukultur training of everyone involved in the building process

The Public Sector: Municipalities

- Strengthen cooperation with local stakeholders
- Develop and establish project- and user-based communication and participation offers
- Strengthen the neighbourhood-related planning level and social space
- Establish design advisory councils to ensure Baukultur quality

Private Developers, Housing, and Real Estate Market

- Keep in mind "Preserving Value through Baukultur" during refurbishment, renovation, and new building
- Use Baukultur as model of corporate responsibility and implementation of design competitions for planning and building projects

Chambers and Associations

- Formulation of a Baukultur model – Encourage Baukultur discussions on-site
- Educate and provide consultants and specialists
- Develop guidelines for good planning practices
- Expand cooperation in Baukultur education and communication

Federal Foundation of Baukultur and Baukultur Initiatives

- Regularly submit Baukultur reports in the future
- Strengthen the Federal Foundation of Baukultur
- Extend the network of Baukultur initiatives

Contents

Introduction	10
---------------------	-----------

Baukultur in Germany – The Starting Point for Cities

Added Value through Baukultur – Why Should One Be Committed to Baukultur?	18
--	-----------

- The Importance of Baukultur for Germany
- The Economic Factor Planning and Building as Opportunity for Baukultur

Stakeholders of Baukultur – Who Takes Care of the Built Environment?	26
---	-----------

- Networks, Initiatives, and Social Commitment
- Federal, State, and Local Governments
- Private Developers and Owners
- Planning and Building Trades
- Training and Placement
- Science and Research
- Media and Society
- Conclusion – Baukultur between the Priorities of Conflicting Interests

Current Challenges for Baukultur	38
---	-----------

- Changing Values and Technical Innovation –
How Will We Live in the Future?
- Demographic Change – Who Will We Be in the Future?
- Climate Change and Energy Transition –
What Conditions Will We Live under in the Future?
- The Public Sector – Too Big a Responsibility for Tight Budgets?
- Conclusion – What Does This Mean for the Future of Our Cities?

Current Focus Areas of the Federal Foundation of Baukultur

Residential and Mixed Neighbourhoods 62

- Good Arguments for Baukultur –
What Distinguishes Mixed Neighbourhoods
- Status Quo and Current Developments
- Scope and Potential
- Conclusion and Outlook

Public Space and Infrastructure 76

- Good Arguments for Baukultur –
What Public Space Can Achieve
- Status Quo and Current Developments
- Scope and Potential
- Conclusion and Outlook

Planning Culture and Process Quality 92

- Good Arguments for Baukultur –
What Can Be Achieved with Good Planning
- Status Quo and Current Developments
- Scope and Potential
- Conclusion and Outlook

Recommendations for Action from the Federal Foundation of Baukultur 112

Appendix 119

Project Profiles, Sources and Literature,
Picture Credits, Acknowledgements

Introduction

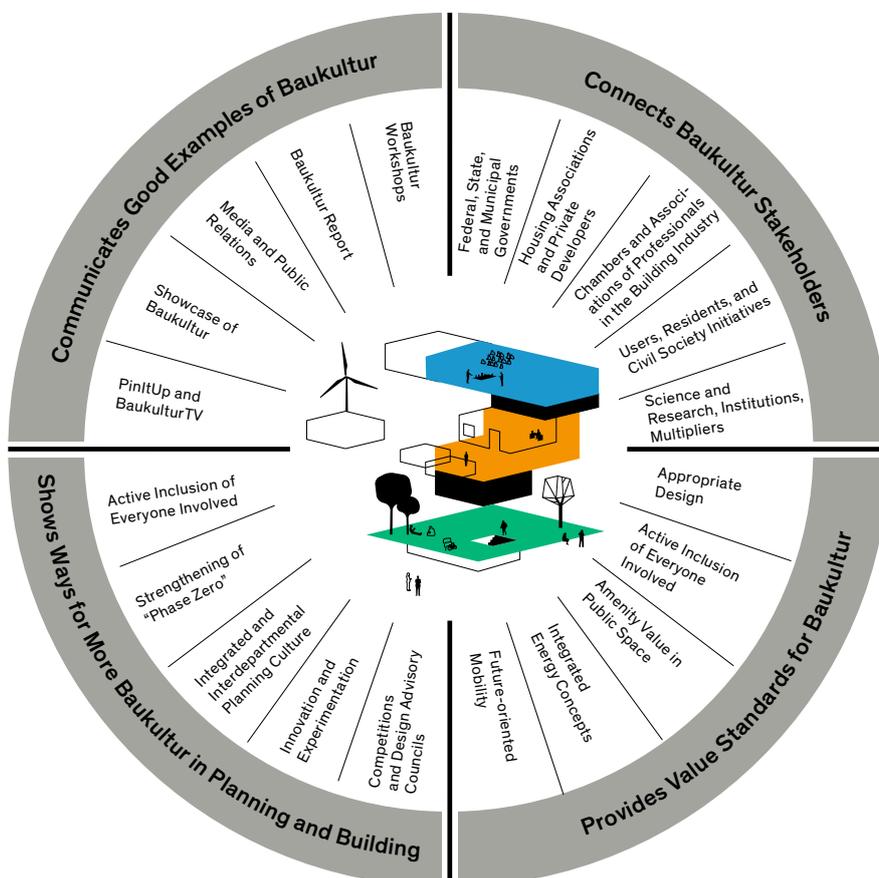
Even if we still view our world as something natural, it is nevertheless in increasing dimensions and almost completely established and designed by people. The Dutch meteorologist and Nobel Prize winner for atmospheric chemistry Prof. Dr. Paul J. Crutzen calls this the “new world of the Anthropocene, which lies before us”, in which we still have the chance “to become a permanently viable, creative, and liberal civilisation” despite all of the challenges and setbacks. We widely perceive Europe and Germany as a cultural landscape with settlements and cities with Baukultur identity. Herein lies one of the essential causes for the rising importance that the topic of Baukultur has experienced in the past two decades. Baukultur in the form of the built environment is everywhere. It shapes us, and we form it through our everyday actions as users or active designers of living spaces. Yet, much goes wrong in our common perception of Baukultur. Everyone can give an account of building sins and has wondered, how could “such a thing” happen, who planned or approved it? Probably never before has so much been planned, discussed, and published about Baukultur – and frequently so banally built. Nevertheless, are we on the right track in the 21st century to deploy our acquired knowledge and to further qualify our built environment?

The Federal Foundation of Baukultur

Already in 2000, chambers and associations – particularly the Federal Chamber of Architects, the Federal Chamber of Engineers, and the Federation of German Architects – suggested the foundation of a Baukultur initiative to the Bundesministerium für Verkehr, Bau- und Stadtentwicklung (BMVBS, Federal Ministry for Transport, Housing and Urban Development). This occurred in the context of the EXPO 2000 in Hannover with the theme People-Nature-Technology, and the World Conference on the Urban Future (Urban 21) in June 2000 in Berlin, in awareness of globalisation and the integrated interdependencies of Baukultur factors influencing the built environment. The BMVBS took up the suggestion and started – together with the Beauftragter der Bundesregierung für Kultur und Medien (BKM, Federal Commissioner for Culture and Media) as well as the chambers and associations of nationwide planning professionals – the “Initiative Architecture and Baukultur”. A steering group was formed, which included representatives from the federal states and municipalities; the building, housing, and banking sectors; visual artists; as well as other institutions from the field of architectural promotion and preservation. From the beginning, it was not just a matter of architecture in the narrower sense, it was also about civil engineering, urban development, landscape planning, and standards for good planning and building. In short, it was about Baukultur.

Consequently, a perspective on Baukultur was initially drawn up, the still relevant status report in the 2001 Baukultur in Deutschland – Ausgangslage und Empfehlungen (Baukultur in Germany – Starting Position and Recommendations) by Prof. Dr. Gert Kähler on behalf on the BMVBS (also see <http://dip21.bundestag.de/dip21/btd/14/089/1408966.pdf>). Many of the statements made there are still valid; forgotten recommendations for action should be taken up again. From here, a common theme extends to the second Report on Baukultur in Deutschland (2005), up to the establishment of the Federal Foundation in 2006 by federal law. The focus of the foundation's tasks includes the communication and mediation of the topic of Baukultur, both with respect to a general public as well as the German location factor in an international context. Printed matter, regulations, and statutes clearly express this foundation mission, and at the same time indicate a still effective divergence of demand and the realistic opportunities of a small foundation with five permanent posts.

The foundation, which is based in Potsdam, did nevertheless successfully start its work on this basis in 2007 and has since then become an important and competent partner in the field of integrated planning and building processes. Through the Förderverein (Friends' Association), which successfully supported its establishment, the foundation stands on a solid and unique base of professional groups and institutions. In the interests



Commitment to Baukultur

Federal Foundation of Baukultur Scope of Duties and Network

of a broad supportive community, the number of Förderverein members is currently growing. In its development phase, the Federal Foundation initially developed the topic area of Baukultur and then set the framework for the performance of its tasks. A mission or self-awareness for the institution Federal Foundation of Baukultur was created and justified: the Federal Foundation as an independent body that supports Baukultur issues and wants to make the built environment a topic of public interest.

Baukultur significantly influences everyone's quality of life – in cities and in rural areas. The foundation is thus a stakeholder in good planning and building, as well as a platform that promotes public discussion about Baukultur. In addition, the focus is on consolidating the first successes and structuring future topic areas and projects. Overarching social trends – from demographic population development to climate change to changing social values due to finance and economic crises – are the starting point for this content-related profiling. These trends all have direct and indirect effects on the existence and the condition of built living spaces and are thus big challenges for Baukultur. None of these challenges can be solved through the private market alone, but are a matter of public responsibility: Baukultur is first and foremost a public task.

The Federal Foundation, among only a few other institutions in Germany, has the privilege of regularly presenting a report on the state of Baukultur to the federal cabinet and parliament. The foundation now uses this privilege for the purpose of a common theme in its own work. The result is the third Baukultur Report – the first developed by the Federal Foundation.

The Focus Areas of the Federal Foundation of Baukultur

To do justice to the range and complex interactions of urban living space, the foundation is focusing on three topics with the Baukultur Report 2014/15: "Mixed Neighbourhoods", "Public Space and Infrastructure", and "Planning Culture and Process Quality". They are at the centre of the debate about the future of the city. In the 2016/17 report, the foundation will cover regional areas.

These topics, raised by the foundation a year ago, gain increased importance through the most recent social debates and events. Consider the current housing policy measures and housing promotion, which aim to provide about a million new residences in growth areas over the next four to five years. It matters what these residences look like, how sustainable they are, and how technologically innovative their contribution to climate change is. Moreover, budgets in public infrastructure will run into the billions in coming years for the reduction of maintenance deficits. Each renovation or expansion of a street, bridge, or pipeline infrastructure can bring about a qualitative and design improvement! Not only for the structures themselves, but also for the surrounding public space. Here, as everywhere, in addition to thorough preliminary investigations ("Phase Zero"), an ex post analysis of successful projects is also needed to show which processes (including public involvement) lead to good results. Baukultur is also process culture!



The Baukultur Workshops

The three key issues mentioned were also the subject of three well-attended, public Baukultur workshops, which took place in the first half of 2014 in cooperation with the Akademie der Künste in Berlin. Their results have been included in the Baukultur Report 2014/15.

The first workshop in January 2014 was dedicated to the topic “Mixed Neighbourhoods”, because a social as well as functional mix in the neighbourhood vitalises urban space. Residential buildings in the city should thus allow flexibility and variability – including for future utilisation needs. Shared spaces and locations that are open to the public are as necessary for the emergence of mixed neighbourhoods as the inclusion of environmental aspects in renovation and new building. We need buildings that are both customised as well as adaptable in order to enable sustainable living and working. The vitalisation of a vibrant ground floor zone and an attractive open area play a key role here. Also, a neighbourhood-oriented planning approach for achieving these objectives is of central importance.

The second workshop in March 2014 had the topic “Public Space and Infrastructure”, because the constituent element of a functioning living and working environment in the city is public space. Only when it offers pleasant ambience, public options for use, and access for everyone does it establish a community. Likewise, a functioning infrastructure is essential for living and working in the city. New mobility concepts, digital communication channels, and intelligent supply and disposal cycles increase due to the lack of fossil resources and are promoted by a change in social values. How does one promote innovate technologies and experimental solutions? How is added value created for the quality of public space in this way?

The third workshop took place in May 2014 on the topic “Planning Culture and Process Quality”, because only good planning can guarantee long-term success of new buildings and renovations. Organising a project so that an effective inclusion of developers and users is possible on many levels, and a consistent architectural concept emerges at the same time, is a big challenge



and responsibility for the planning profession. The role and the occupational profile of architects, landscape architects, engineers, and planners will have to be newly defined in the future. The need for participation is growing in society; new forms of dialogue culture are demanded. Through a professional collaboration between the public sector and private sponsors, customised answers as well as strategies for dealing with transformation spaces and existing neighbourhoods, and also methods for competent implementation of large projects, can be found. For this purpose, the important concept phase, the so-called Phase Zero, as well as the evaluation and subsequent review of projects (Phase Ten) have to gain more importance in planning. How can the planning practice function properly in light of excessive demands stemming from increasingly complex laws and norms? On the whole, higher planning and cost certainty, and not least a greater acceptance of better planning practices, have to be the objectives.

The Baukultur Report

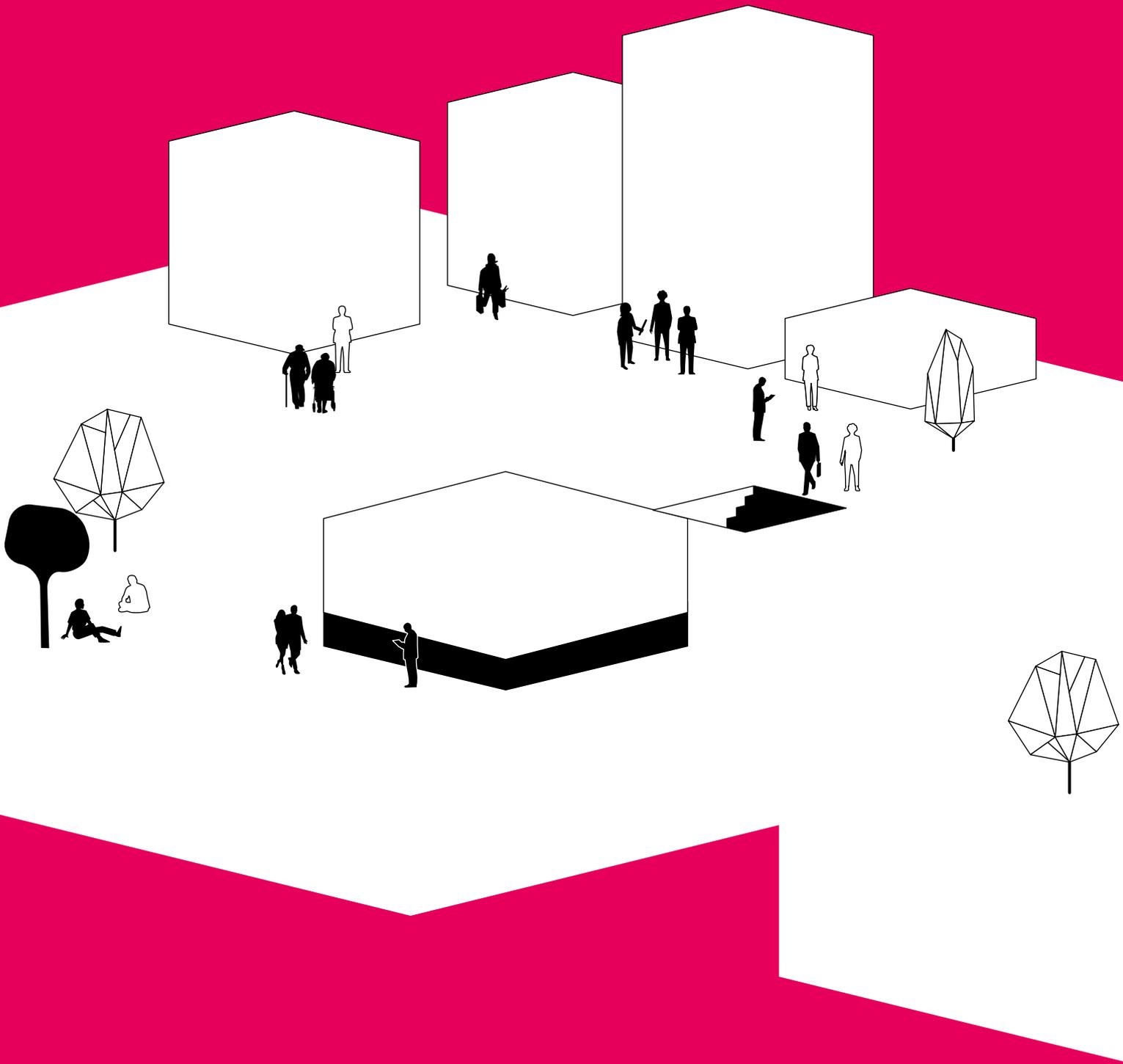
The Baukultur Report 2014/15 arose from a collaboration with the Deutsches Institut für Urbanistik (Difu, German Institute for Urban Affairs) and the Technical University of Berlin. It was advised by the foundation's advisory board as well as a multidisciplinary advisory group and approved by the board of trustees to present to the cabinet. A special feature of the preparation are two statistical surveys, a municipal survey by Difu with the support of the Deutscher Städtetags (German Association of Cities) and the Deutschen Städte- und Gemeindebund (German Association of Towns and Municipalities), as well as a general population survey conducted by the opinion research institute Forsa. In preparation for the surveys, four focus groups that looked at cities and Baukultur from very different perspectives were carried out with recognised experts. In response to the questions developed by these focus groups, 808 cities and municipalities replied in writing and 1,200 individuals in representative telephone interviews. The findings are in part new and so productive that the Federal Foundation will publish a volume with the detailed findings as a supplement to the Baukultur Report 2014/15.

Not surprisingly, it is evident that only a small number of German citizens even know about the foundation or understand anything about the topic of Baukultur. It is perhaps more surprising that a number of cities were unable to work on the Baukultur questionnaire because there was no one in their administration with the competence for this. Otherwise, city planning departments were usually responsible for the questionnaire. Other departments, such as education and social services, were usually not involved.

For the foundation it was important, through this complex creation process, to ensure that the Baukultur Report was developed in consultation with specialists and experts, because Baukultur is an interdisciplinary and multi-disciplinary issue that can only be guaranteed through cooperation. Accordingly, there was not only systematic feedback on the status of the Baukultur Report with the three Baukultur workshops, the advisory group, and the foundation's advisory board. In addition, apart from several individual discussions, a central coordination meeting with associations, chambers, foundations, and initiatives took place in March 2014.

Nevertheless, or directly because of this, the Baukultur Report cannot fulfil all of the hopes and expectations placed on it. Nor can this be its function. It is rather the basis for a dialogue about good ways to expand understanding of Baukultur in Germany – not least during gatherings convened by the Federal Foundation of Baukultur. The Baukultur Report 2014/15 is to be understood as the prelude to a document series to appear every two years that assembles the essential references on the situation of Baukultur in Germany and makes them accessible for discussion in politics and society. Thus it leads to recommendations for action, which the Federal Foundation presents for different groups of stakeholders. Ultimately, it picks up the ball from parliament and the government and refers to the coalition agreement for the current legislative period. On page 131, it says, "We want to promote a broad social dialogue on Baukultur issues – even for federal building projects. As an important partner for this, we want to strengthen the Federal Foundation of Baukultur".

Baukultur in Germany: The Starting Point for Cities





Added Value through Baukultur

Why Should One Be Committed to Baukultur?

Baukultur is essential to create an environment perceived as liveable. In addition to social, environmental, and economic issues, it also has an emotional and aesthetic dimension. Its production, appropriation, and use is a social process, which is based on a broad understanding of qualitative values and aims. The commitment to Baukultur makes sense from the view of many participants in this process: private developers can create the basis for long-term value or appreciation in their investments. The public sector can contribute to the uniqueness of our cities with their projects and thus promote local and national identity, and through initiatives, politicians can absorb the potential for discontent, channel it productively, and in this way achieve broad approval for development and changes. Baukultur is a key for everyone to gain social and economic added value. Baukultur in an investment in the future.

The Importance of Baukultur for Germany

Baukultur is important for our society. With this insight, the importance of Baukultur is emphasised in the coalition agreement of the governing parties for the 18th legislative period. The economic goals of building should be more strongly connected to the demands of the energy transition, Baukultur, and new technologies. At the same time, the governing parties – as public developers for federal buildings – are committing to their role model function, particularly in the area of Baukultur. The federal government has recognised what social and thus also economic potential is embedded in Baukultur quality. The happier people are in the environment in which they live – with buildings, squares, and streets – the more willing they are to commit to the preservation, care, and further development of that quality, also for future generations. They live in the built environment not only with functional criteria, but consciously and unconsciously perceive much more what influences health, well-being, and public spirit.

There are increasingly studies in science and practice, which in this sense approach the issue of a verifiable added value through Baukultur – similar to studies that investigate the importance of green areas in cities to increases in land value and real estate, e.g., the study *Der Wert des Grüns*

Baukultur Is Diverse

From the Perspective of Citizens

When you hear the term "Baukultur": What do you think about?
In your opinion, what does Baukultur mean?
(open answers from respondents, multiple answers possible)

Appearance of Places and Structures in General

9%

Style and Aesthetics of Buildings

17%

Old and Historical Buildings in General

7%

Architecture of the Buildings

7%

Cultural Buildings

5%

Extraordinary and Special Buildings

2%

From the Perspective of Experts

From your point of view, how important are the following criteria for Baukultur?
(Answers from municipal planning departments with responses "important" or "very important", multiple answers possible)

Aesthetics/Design **94.7%**

Local Identity **93.0%**

Protection and Maintenance of Building Stock Worthy of Protection **91.7%**

Meticulous Craftsmanship **84.7%**

Sustainability **77.7%**

Material Quality **76.0%**

Functionality **67.2%**

Planning and Process Quality **63.5%**

Profitability **59.4%**

Consensus of All Stakeholders and User Groups **56.9%**

Resource Conservation/Sustainability **56.6%**

Consideration of Social Issues **50.0%**

Integrated Location **47.3%**

Flexibility/Adaptability **44.8%**

Technical Innovation **28.2%**

Adaptation of Buildings to Surroundings and Local Conditions

14%

Sustainable, Ecological Building

4%

Urban Development, City Planning, and Design in General

18%

Innovative and Modern Building

5%

Guidelines for Building Projects

2%

Socially Responsible Building

10%

Maintenance, Restoration, and Protection of Old and Historic Buildings

23%

Maintenance and Renovation in General

2%

Source: Municipal survey on Baukultur 2014
(Difu, on behalf of the Federal Foundation of Baukultur)
summary of answers

Source: Population survey on Baukultur 2014
(Forsa, on behalf of the Federal Foundation of Baukultur)
summary of answers

(The Value of Green) by the Technical University of Dortmund or the Global Green Space Report 2013. Building societies enter Baukultur aspects in the calculation of building lifecycle costs (more structural quality = more careful handling by users = fewer maintenance costs). Or there are considerations of a “city yield”, in which an increased commitment by private developers for public issues – for example in the form of improvement measures in nearby areas – is not registered as unnecessary additional costs, but as economically profitable investment. And in the real estate industry, the inclusion of design quality in the determination of fair market values is being deliberated. Even if the added value through Baukultur is ultimately not measured precisely with numbers, the positive impact of life satisfaction and appreciation of the built environment on its preservation – and thus the sustainable value – is apparent. The added value through Baukultur is obvious.

The vast majority of the population enjoys living in their cities, but there is potential that can still be expanded: **About a quarter of the German population is not satisfied with the design of streets, squares, and buildings (23%), the regulation of automobile traffic and parking in residential areas (26%), with the maintenance and upkeep of buildings, streets, and squares (27%), or with the vitality of district or town centres (29%).**

The awareness of added value through Baukultur is consistently pronounced in the municipalities. According to the municipal survey, over 70% of the surveyed cities said that the guarantee of Baukultur qualities within their personal everyday working environment plays a very important or important role. Above all, aesthetics, design, and local identity, as well as security and maintenance of building stock worthy of protection, and diligent craftsmanship are considered by experts in city administration to be particularly relevant to the quality of the built environment.

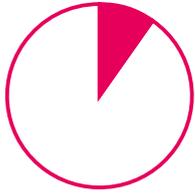
Equally important in terms of Baukultur, however, is the responsible design of the planning and implementation processes. This requires extensive coordination and is often time-consuming and costly, but ultimately opens up new possibilities to arrive at individual, site-specific and distinctive buildings, urban structures, and urban spaces. If the quality of buildings and urban spaces is convincing, they are accepted by the population and treated better by the user.

Baukultur quality should not only be reflected in central locations or in individual lighthouse projects, but also in the breadth of everyday structures. After all, an increase in Baukultur leads to greater stability, satisfaction, and care in dealing with the built environment. Where it is built, renovated, and upgraded today with quality – in terms of sustainability – the living spaces of the future will emerge. And last but not least, where locations realise their Baukultur value, Baukultur also benefits the ground rent.

In the planning and design of the built environment, federal, state, and municipal governments are just as responsible as stakeholders from landscape planning, urban planning, architecture, transportation science, engineering, the public and private housing industries, the building trade, and civil society. But also the trades, manufacturing industries, service providers, and residents – as developers and users – contribute their share to the quality of the built environment. The integration of stakeholders involved in the design, construction, and appropriation processes is an

Economic factor planning and building

Source: Destatis 2014a



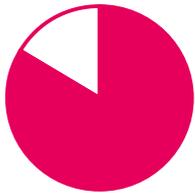
Share of Construction Work
in Germany's Gross Domestic
Product 2012

10.0%



Share of Buildings in
Germany's Gross Fixed
Capital Formation 2012

56.6%



Share of Buildings
in Germany's Gross
Fixed Assets 2012

83.8%

change, as well as the possibilities of new technologies. In practice, the integration of these aspects requires interdisciplinary and open design planning and implementation processes for all building projects – whether in building construction, in urban development, in open space planning, or in infrastructure measures. It is important not to be limited solely to individual aspects, but to keep an eye on the full range of new requirements, necessary restrictions, opportunities, and innovative ideas. The quality of the realised measures has a direct influence on how we will all adjust to social change. Baukultur is the key to a liveable, social, environmentally and economically responsible and compatible development of our built environment.

German cities are known nationally and internationally both for their valuable historic centres, as well as for high-quality planning and building projects in the context of current tasks. Therefore, an important element of Baukultur is the preservation of architectural heritage. Thus in the current coalition agreement, the preservation of monuments is considered a national task, and the continuation of the federal monument preservation special programme, as well as the programme “National wertvolle Kulturdenkmäler” (National Valuable Cultural Monuments), has also been announced. In addition, plans are underway to initiate a “Europäisches Jahr für Denkmalschutz” (European Year of Cultural Heritage), similar to the “Europäischen Denkmalschutzjahr 1975” (European Architectural Heritage Year 1975). Besides dealing with the historic buildings and the development of rural areas, the great challenge today is above all in the systematic and sustainable expansion of the existing building stock and the expansion of our cities. How will the population live in the cities of the future? Which offerings does public space have to keep available? How can the needs of society be determined and integrated in concrete building projects? With constant change in social conditions, the city has also been subject to a continuous transformation process. The high quality of urban and building structures can be measured by how they enable this transformation process.

The quality of buildings, public space, and the cityscape is characterised in many cities by a high degree of design skill, care, and meticulous craftsmanship. Urban planning must refer to the spatial form of the city and also further develop it architecturally. Where today it is built in the spirit of sustainability, the high-quality living spaces of the future emerge. Thereby communicating about Baukultur with all of the relevant stakeholder groups as well as with the public, so that they understand Baukultur not only as a process of building, but also as appropriation and cultural practice – all of this involves the opportunity not only to achieve a better understanding of planning processes and building projects, but also to provide impetus for an entrepreneurial and civic engagement for the quality of planning and building. With a comprehensive discussion and awareness of all stakeholders, as well as the public, it may be possible to convince all parties of social added value through Baukultur.

The Economic Factor Planning and Building as Opportunity for Baukultur

The vast majority of the German national wealth lies in property assets. In addition, planning and building have a large share of Germany's economic output. As measured by 2012 values, all building activities account for 10% of gross domestic product, and at 56%, more than half of all investment in Germany. In a European comparison, the German building sector plays an exceptional role: while construction volume sharply declined overall in Europe beginning in 2007 due to the economic and financial crisis, Germany showed increases.

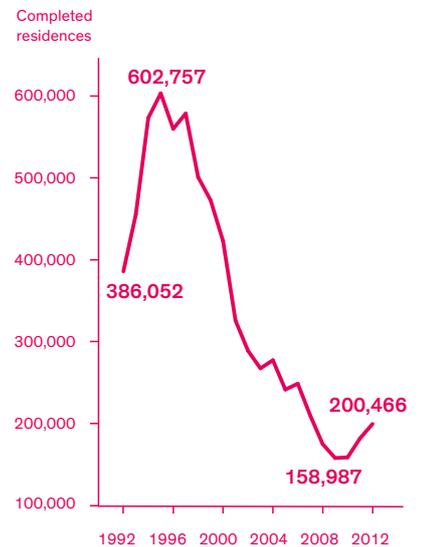
Residential construction has the largest share of the total construction volume, with 309 billion euros. Compared to other areas – such as commercial and public sector building construction and civil engineering – more than half of investment is in existing and new buildings, with 171.5 billion euros flowing there. There are over 40 million residences in Germany, and since 2005 their number has grown annually by an average of 200,000. Thus, housing is the backbone of building activity, even if the magnitude has declined since the mid-1990s.

It is interesting that the majority of investments has not been made in new building, but three-quarters in construction work on existing buildings – i.e., conversions, extensions, (energy) refurbishments, renovations, and repairs. How is the existing building stock handled? What level of appreciation does post-war modernism – which accounts for a major part of the

New residential construction as backbone of building

Completed residences 1992–2012

Source: Destatis 2013a



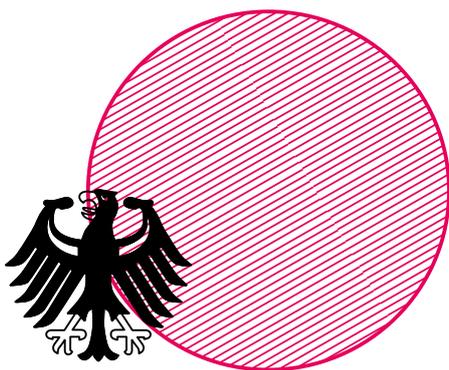
How much is being built in Germany?

Construction volume in size comparison

Source: BMVBS 2012a; BMF 2014; BMWi 2012; DAT 2013

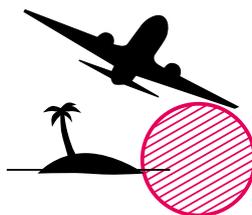
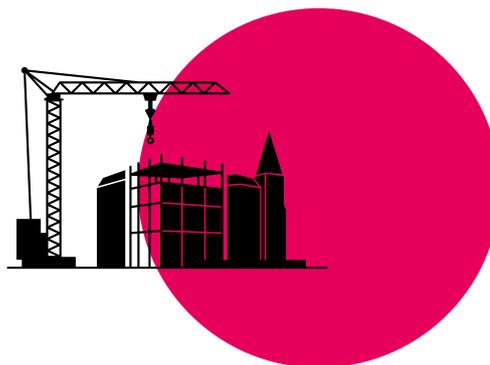
Construction volume in Germany 2012

309.4 BN €



Total government spending in Germany

311.6 BN €



Revenue from Germany's tourism industry

97.0 BN €



Germany's new car market 2012

82.6 BN €

Development of existing building stock is central

Structure of residential construction according to new building and refurbishment in Germany 2012

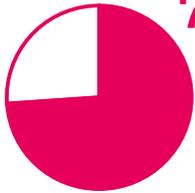
Source: BMVBS 2012a

New construction volume

26.0%

Work on existing buildings

74.0%



Residential construction dominates

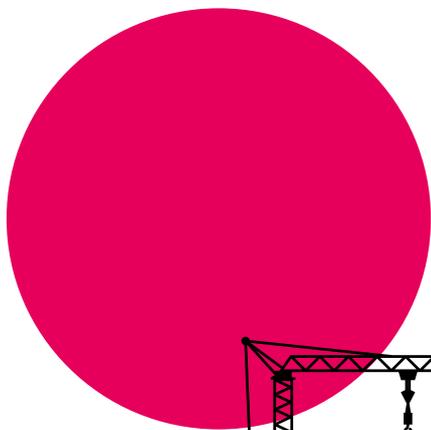
Nominal construction volumes in Germany according to construction sectors

Quelle: BMVBS 2012a

Residential Construction
171.5 BN €

Commercial Construction
95.6 BN €

Public Construction
42.2 BN €



Structural Engineering

68.2 BN €



Civil Engineering

27.4 BN €

Structural Engineering

18.3 BN €



Civil Engineering

23.9 BN €

Construction volumes in Germany 2012

309.4 BN €

existing building stock – enjoy? What adjustments to changing living and housing needs are necessary? The structural answer to these and other questions significantly determines the quality of the urban living environment and has major implications for everyone. What is more, care and renovation of the existing building stock are tasks for the whole of society, because 75% the residences belong primarily to private individuals or condominium communities. The remaining 25% are in the hands of housing associations, cooperatives, or other professional stakeholders.

Hence, private building owners help shape the image of cities and towns, and thus consciously or unconsciously contribute to the German Baukultur. The sustainable design of building is not only important for the development of our cities, but also for the owners themselves; residential properties are the most important segment in the asset base of private budgets. They often function as old-age security, and for this reason, would already have to fulfil a high standard of quality and sustainability. All private developers can gain advantages through Baukultur for the sale or lease of their properties, and thus in the long term influence their value or appreciation. As a result, renovations occur regularly; about a third of the portfolio investment in residential construction is devoted to energy upgrades. How these renovations are implemented in turn largely determines the appearance of housing estates and streets in German cities. Meanwhile, commercial construction – including offices, administration buildings, hotels, as well as production and storage buildings with associated civil engineering – is well behind in second place in the distribution of building investment. Two-thirds of all investments here focus on the existing building stock.

In third place, public building represents the smallest financial segment. The comparatively low share of public investment in construction compared to residential and commercial construction is in contrast to the type and location and thus to the social significance of public buildings. They are often in central locations, in the city centre, and in urban situations, or they define a town centre by their cultural or central function. Also, the buildings often belong to the protection-worthy architectural heritage of the cities. Thus, public buildings often have an identity-promoting effect. Therefore, public sector buildings play a central role when it comes to shaping local, national, or even internationally recognised Baukultur.

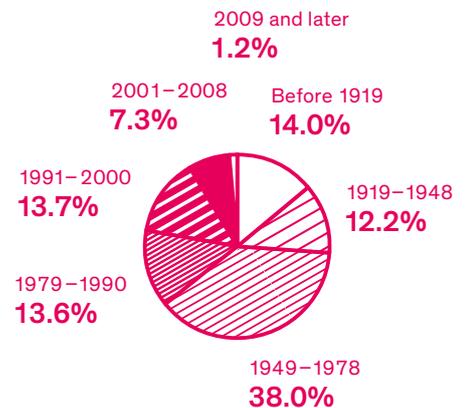
In contrast to this significance, however, public construction investment has recorded a significant decrease since the mid-1990s that was only halted with the help of the investment funds from the economic stimulus packages – effective for the building trade in 2010 and 2011. After its expiry, public construction spending fell to its lowest level since reunification. As the most important public project contractors, the municipalities and associations of local authorities have a crucial part in this development, because despite their current slightly positive fiscal balances, they usually have to service large public sector loans, which often prevents investment.

Overall, strong regional differences can be discerned, related to the public sector's building activity. Almost a third of total construction is realised in southern Germany – in Bavaria and Baden-Württemberg. In eastern German federal states, public construction plays a larger role in building investments, between 18% and 22%, than in western Germany, just under 14%. By far, private stakeholders have the largest share of the construction volume. Good planning and building and the preservation of built values are thus an overall social responsibility that not only has economic consequences, but also determines the future of our built living spaces.

Focus on post-war modernism (1949–1978)

Share of buildings with living space according to construction year in Germany 2011

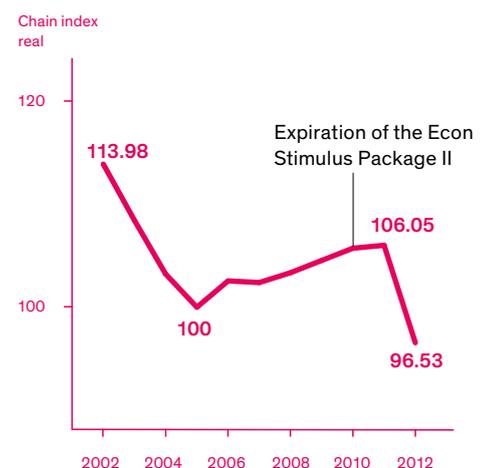
Source: Destatis 2013a



Public construction investments are declining

Development of real construction volumes in public construction

Source: BMVBS 2012a



Stakeholders of Baukultur

Who Takes Care of the Built Environment?

The opportunities to be active for the purpose of Baukultur are diverse: Anyone who plans, builds, and designs, who maintains his living environment, who is involved in a citizens' initiative for their district, or who participates in a discussion about building projects contributes to Baukultur in Germany. In addition to public and private developers, politics, architects, engineers, planners, science, research, education, and training, as well as the media, are all significantly involved in the development of Baukultur issues and their perception. They all influence citizens as recipients and users of the built and designed environment. Baukultur is therefore collective work. The challenge of merging the different interests and motivations is not conflict free. Increasing regulation – a number of new laws, ordinances, and standards – has further complicated the process. Baukultur is not a natural consensus, but rather the result of a complex negotiation process of entirely different actors with different interests, needs, and positions.

Networks, Initiatives, and Social Commitment

At the federal level, as well as in the states and municipalities, there are a wide variety of networks, initiatives, and associations conscious of their role in the communication and promotion of Baukultur. The federal government's "Initiative Architektur und Baukultur" (Initiative Architecture and Baukultur) – which was established in 2000 and adopted in the programme of the "Nationalen Stadtentwicklungspolitik" (National Urban Development Policy) in 2012 – made a major contribution to this after the Federal Foundation of Baukultur was founded in 2006.

In addition to networks operating across Germany, there are particular regional or state initiatives of importance, such as the state initiative StadtBauKultur NRW (Urban Baukultur NRW), the Zentrum Baukultur Rheinland-Pfalz (Centre for Baukultur Rhineland-Palatinate), the Bremer Zentrum für Baukultur (Bremen Centre for Baukultur), and the Netzwerk Baukultur (Baukultur Network) in Lower Saxony. They all complement the local associations and coalitions and thematize regional Baukultur as an identity-forming moment. With their activities, they promote the exchange and critical debate on issues of Baukultur in each of their frames of reference. A good overview of the landscape of over 200 initiatives, foundations, and associations is offered by the Handbuch der Baukultur (Handbook of Baukultur) by the Federal Foundation of Baukultur, whose goal is to support this commitment and to strengthen the initiatives landscape as potentially capable of development.

In the context of the debate on good planning and building, civil society initiatives are usually involved at the local level, usually due to topical reasons – such as resistance against the demolition of historic buildings. In this context, several emotional debates on issues of reconstruction of lost urban components – such as, for example, city palaces – have been held in various locations. These debates show that views or interests are quite different in the population, and Baukultur urgently requires a negotiation process. It also becomes comparably emotional in situations where local residents are affected by changes and fear for the quality of their living environment. Keywords such as “densification” and “gentrification” have long since passed into common usage and often provoke defensive attitudes by local residents towards influx and densification. In addition to the associations, initiatives, and committees that deal explicitly with Baukultur issues, there are many other local initiatives that influence and shape the built environment with their activities and contribute to its quality with their commitment. Building and planning are essential parts of their activities, whether because they organise a playground as a parents’ initiative or start a museum as a local heritage club or set up shopping street management as a merchants’ association. Baukultur values are inevitably also discussed here, even if the primary concern of the respective project does not solely include design aspects. The task – to create an understanding of Baukultur and to promote good design – also rests with the public sector, on the federal, state, and municipal levels.

Federal, State, and Local Governments

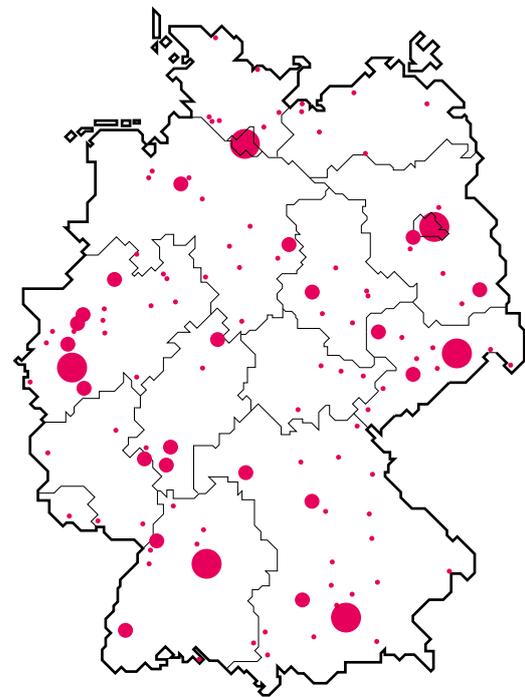
Federal, state and local governments play a central role in promoting the quality of planning and building in Germany. They shape Baukultur through their framework-setting and legislative functions, through subsidies and incentives for private developers, and through their role model function as a public developer. This role model function not only affects the planning of new buildings, but also the handling of the existing building stock. This applies particularly to the technical structures of federal, state, and local governments, traffic infrastructure, and the design of public space in cities, since here the public sector is usually the sole developer. If the public sector economises too much, renovates recklessly, or allows infrastructure and buildings to become run-down, this hardly motivates private developers and owners to make their own investments. On the contrary, being a role model means being a forerunner, promoting innovation and experimentation for the purpose of finding solutions for current and future problems, and achieving quality over and above the usual degree – in both the product and in the processes, in the existing building, and in the new building. This applies in the same way to public companies and municipal utilities.

Moreover, federal, state, and local governments define the legal framework for planning and building in Germany, whereby good interaction among the three levels of government is of great importance. The federal government determines the “rules of the game”, especially through the Federal Building Code and the Federal Land Utilisation Ordinance, the states

Baukultur is widely supported

Distribution of Baukultur initiatives and associations in Germany 2013

Source: Federal Foundation of Baukultur



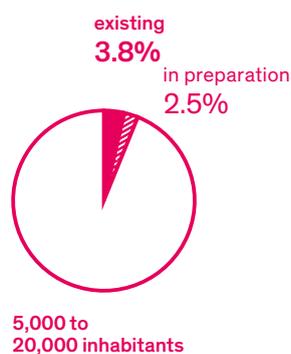
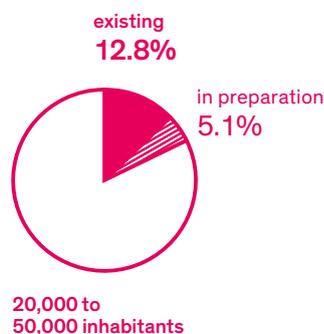
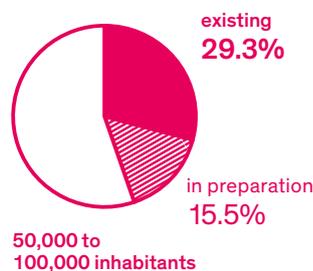
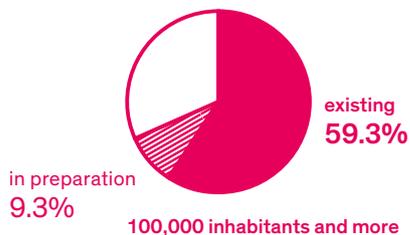
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You didn't find yourself on the map? Write to us:
mail@bundesstiftung-baukultur.de.

Design advisory councils as instruments of major cities

Existence of design advisory councils in Germany according to size of the city

Source: Municipal survey on Baukultur 2014 (Difu, on behalf of the Federal Foundation of Baukultur)



through regional building codes, and the municipalities through urban land use planning and other statutes – for example, design or conservation statutes. The public sector assumes responsibility for monument conservation and has anchored it in the 16 conservation laws of the federal states. Actual decisions on planning and building projects take place, however, at the municipal level. They have municipal planning authority under Art. 28 II 1 GG, and thus the right “to regulate all matters of the local community on their own responsibility within the limits of the law”. Thus, they also set the framework for the construction activities of private developers and hence have a large responsibility for local Baukultur. **According to a municipal survey, in the municipal administration it is the city planning authorities in particular who see themselves responsible for Baukultur: Nine out of ten urban planning offices take a leading role in Baukultur tasks.**

Apart from the “hard” legal elements, many municipalities in Germany also use “soft” instruments to promote Baukultur. Informal planning and development foundations – such as frameworks, design plans, and integrated urban (district) development concepts – enable careful urban and district planning. **In addition, at least two-thirds of all cities offer consultation to those interested in building before a planning application is examined in the building permit process.** Although this initially ties up human resources and there has to be sufficient professional expertise in the administration, targeted advice brings savings, because processes can be accelerated and the sustainability of building quality can be increased. Furthermore, guidelines in the offering of realisation competitions, awarding of prizes and awards, concept-related award processes, as well as conditions in urban development contracts and purchase agreements also grant influence opportunities.

Design advisory councils rank among a special form within the soft and informal instruments at the municipal level. The usually interdisciplinary groups of non-locally based experts advise the municipality on concrete, significant urban projects by private developers, especially in terms of architectural and urban design aspects. They make recommendations and suggestions to improve the Baukultur quality of private building projects. **However, design advisory councils are currently still exceptional. About 68% of the municipalities in Germany have no such committees, nor do they plan their establishment. Here it is important to distinguish between city sizes: While nearly 60% of large cities have a design advisory council, the value decreases significantly with decreasing population. It is harder for smaller towns to ensure the organisational and financial framework for such instruments.** Community-overlapping or mobile design advisory councils, currently being tested in Mecklenburg-Vorpommern, could be a solution.

The substantive debates and discussions about the values of Baukultur also rank among the soft instruments with influence on Baukultur – at the federal level, among others, in the framework of the Nationale Stadtentwicklungspolitik (National Urban Development Policy), which in this context also promotes projects. Financial incentives for the implementation of Baukultur qualities are also offered by funding programmes, like urban development programmes, with whose help private investment in urban neighbourhoods can be encouraged. Usually organised jointly as “tripartite financing” by federal, state, and municipal governments, urban development

promotion aims to resolve urban, functional, and social ills in the framework of overall urban planning measures. **From the perspective of the municipalities, the federal-state programmes for urban development promotion are of immense importance: About nine out of ten cities see urban development promotion as a (very) important tool for the implementation of Baukultur qualities.**

Also, through the funding and content design of education and training – as well as the promotion of science – there is an indirect public sector influence on the quality of the built environment. The design and maintenance of educational buildings also plays a central role: It not only has a positive effect on the learning environment, but schools in particular can be an important engine for neighbourhood development.

Federal, state, and municipal governments also bear a heavy responsibility for Baukultur. Yet they are also dependent on limiting – among others – financial framework conditions, societal factors, as well as the interests of other stakeholders and decisionmakers.

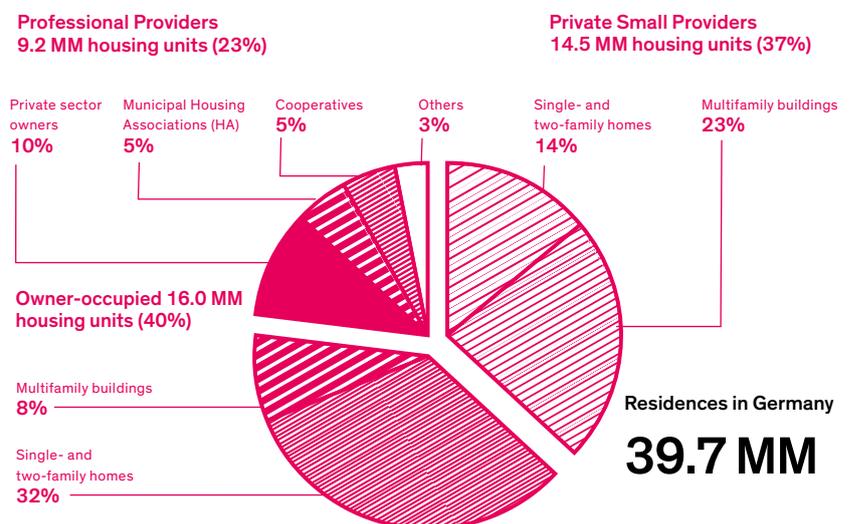
Private Developers and Owners

In addition to public developers, private developers and owners are principals of building measures. Due to the high volume of existing and new construction in private ownership, they have an important role with respect to Baukultur. Their social responsibility as owners is already designated in the Basic Law (§ 14, para. 2): “Property entails responsibility. Its use should also serve the public good.” New commercial building is fully realised by private sector stakeholders, and in the housing market they hold the clear majority of the building stock of 40 million residences in Germany, and thus contribute significantly to Baukultur in German cities. However, due to the many different groups of owners, a common understanding for building, design, and other technical aspects can hardly be assumed.

Privately owned residences

Provider structures in the German housing market

Source: BBSR 2011a (Data of 2006)



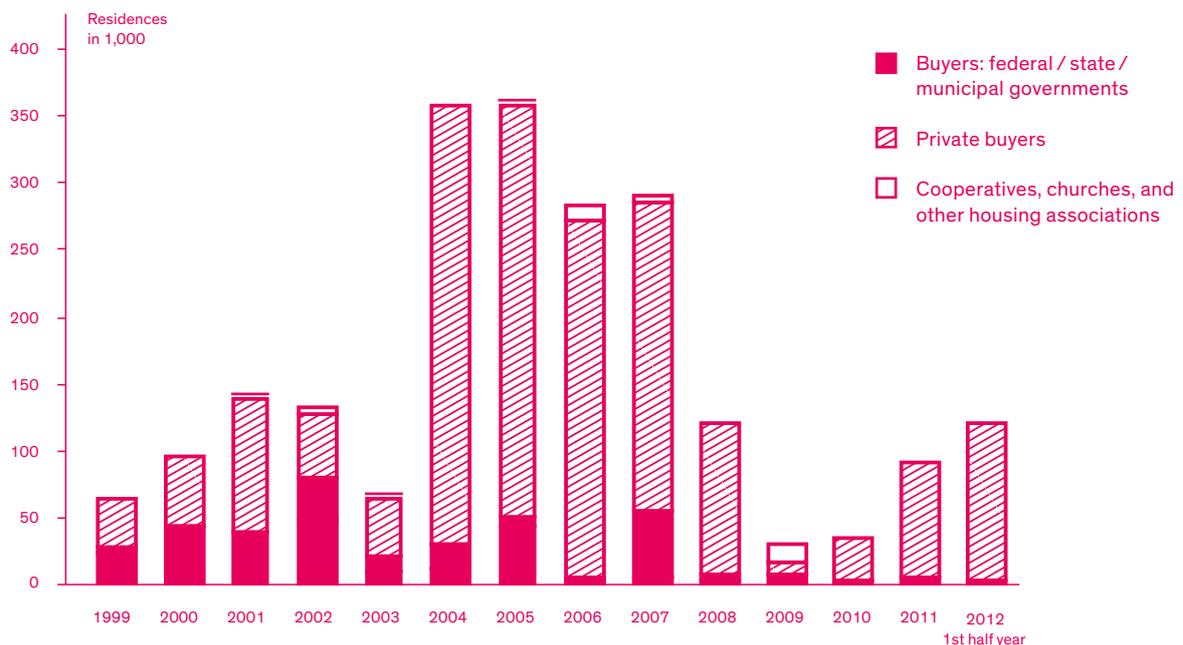
In 2006, about 40% of the existing housing stock was owner-occupied; here, the resident is also the owner and decides about building measures in the building or apartment. There are regional differences here, particularly eastern Germany and larger cities are characterised by low home ownership rates. Nevertheless, this rate has risen in the last decade, and according to 2011 census data, has reached 45.8%. Compared with other European countries, the homeownership rate in “Renter’s Germany”, however, is small compared with, for example, Southern and Eastern Europe, where it exceeds 80%. The motivations for owner-occupied property vary, ranging from inherited residential property, to the desire to create and possess something of their own, to the provision for old age. Conscious aspects of Baukultur in dealing with one’s own building stock play a role to very different degrees of intensity. Personal preference and financial leeway largely determine respective characteristics and investments.

The remaining nearly 24 million residences in Germany are rental housing. The majority – 14.8 million – is held by small private providers; only about 9.2 million homes are owned by larger private enterprise companies. Nevertheless, these companies still shape urban space more strongly than owner-occupiers and small providers: They affect a distinctly larger number of properties simultaneously with their decisions, which through their location, concentration, or simply their mass impact the cityscape. Their inventory often includes semi-public outdoor areas, which are also used by local residents from the area, and in this respect are important for public space. Among professional stakeholders, distinctions can be made between the municipal and other public housing companies, cooperatives, and private housing providers; they are not a homogenous group with similar interests. However, what they do have in common is their strictly yield-oriented action. This also applies to a certain extent – at the latest since the elimination of non-profit status in 1990 – to municipal housing providers. Nevertheless, non-profit status is still more prevalent among them than in the other

Existing housing stock increasingly privatised and internationalised

Share of buyers' groups in housing transactions (over 800 housing units) from 1999 to mid-2012

Source: BBSR 2012a





Buchheimer Weg, Köln

The Second Life of a Residential Estate from the 1950s

With its linear blocks and open spaces, the Buchheimer Weg estate in Cologne corresponded to the typical housing developments of the 1950s. Due to the poor structural condition, an energy renovation was not cost-effective, even with subsidies. The new interpretation of the urban development plan aimed to maintain the rent prices and the residents. In achieving this, the planning law was not changed (additional costs!), nor was new infrastructure created. The colourful, kinked buildings maintain the principle and the good lighting, ventilation, and orientation of the previous estate pattern and create additional green courtyard structures with offerings for all ages. The 435 apartments are subject to price control, are barrier-free, and offer different apartment sizes to promote the mixing of residents. Social facilities – such as a tenants' café, a kindergarten, and a group home for people with dementia – support this strategy. The owner and developer is GAG Immobilien AG. Thus, the firm's main shareholder, the City of Cologne, had an impact on the social policy priorities for the new construction. With the critical further developments, the example offers new perspectives for residential estates from the 1950s and 1960s that have similar problems. The targets set new standards in view of the tight rental markets in many cities.

Developer: GAG Immobilien AG, Köln

Urban Planning and Architecture: ASTOC Architects and Planners, Köln
Landscape Architecture: Büro für urbane Gestalt, Johannes Böttger
Landschaftsarchitekten, Köln

Structural Planning: AWD Ingenieure, Köln

Planning/Construction Period: Competition 2005 (1st Prize) / Planning 2005–2010 / Completion BP1 2009, BP2 2011, BP3 2012



professional companies. Through their close ties to municipal politics, they also often implement – in addition to housing policy – urban development and social policy and, thus in a broader sense the municipality's Baukultur goals.

The privatisation of public housing stock, which was heavily covered in the media and in principle leads to a loss of social and Baukultur control options, has abated in recent years. Its peak phase was a total of nearly 1.3 million homes sold from municipal housing stocks between 2004 and 2007. After 2007, the transaction volume dropped sharply, due to the financial crisis, but rose again in 2011 and 2012. Through these transactions, the structure of private housing providers has changed; it has become more international and less anchored locally. This is associated with a shift in the housing stock to more short-term and medium-term yield expectations. On the other hand, Baukultur goals often recede, and internationalised housing providers are difficult to involve in urban and neighbourhood development local objectives.

Thus, there is no typical private developer or owner: The importance of Baukultur for private developers and owners is different, and in this sense they also exercise their legally required social responsibility for the planned and built environment in highly varying degrees. Among private builders, there are strong public sector partners, and key supporters for the design quality of buildings or of public space. Especially technical innovations and design experiments would hardly be possible without financially strong private builders, as the example of the Mercedes-Benz Museum of Daimler-Chrysler Immobilien (DCI) in Stuttgart proves. Some, however, are difficult to engage for Baukultur issues – be it through the anonymous developer structure, as in international funds, though the fragmentation of their property, or due to a lack of awareness of design quality characteristics. Yet, through Baukultur, all private developers can establish a positive basis for their buildings and their surroundings, and thus in the long-term promote their value preservation or performance.

Planning and Building Trades

As “creators” of buildings, architects and engineers are the third important stakeholder group for the built environment. Therefore in societal debate, they are also often the focus of attention. Their task is the formative, technical, economic, and environmental planning of buildings, spaces, and landscapes, as well as local, urban, and regional planning. The titles “architect” or “interior architect”, “landscape architect”, “city planner”, and “consulting engineer” are protected by law, and may only be held by members of a corresponding German chamber. In a similar manner, the Chamber of Architects' code of conduct laws for all states require that its members conscientiously exercise their profession. This includes in particular architectural, technical, economic, environmentally compatible, and social planning and design – as required, for example, by the architectural and engineering law of the state of Mecklenburg-Vorpommern. The Berufsvereinigung der Stadtplaner (Professional Association of City Planners) – die Vereinigung für Stadt-, Regional- und Landesplanung e. V. (Association for

Town, Regional, and State Planning (SRL e. V.) – defined in its self-conception that its members “in the design of the environment through responsible implementation of spatial planning contribute to safeguarding the future and the requirements for a ‘good life’ for future generations”.

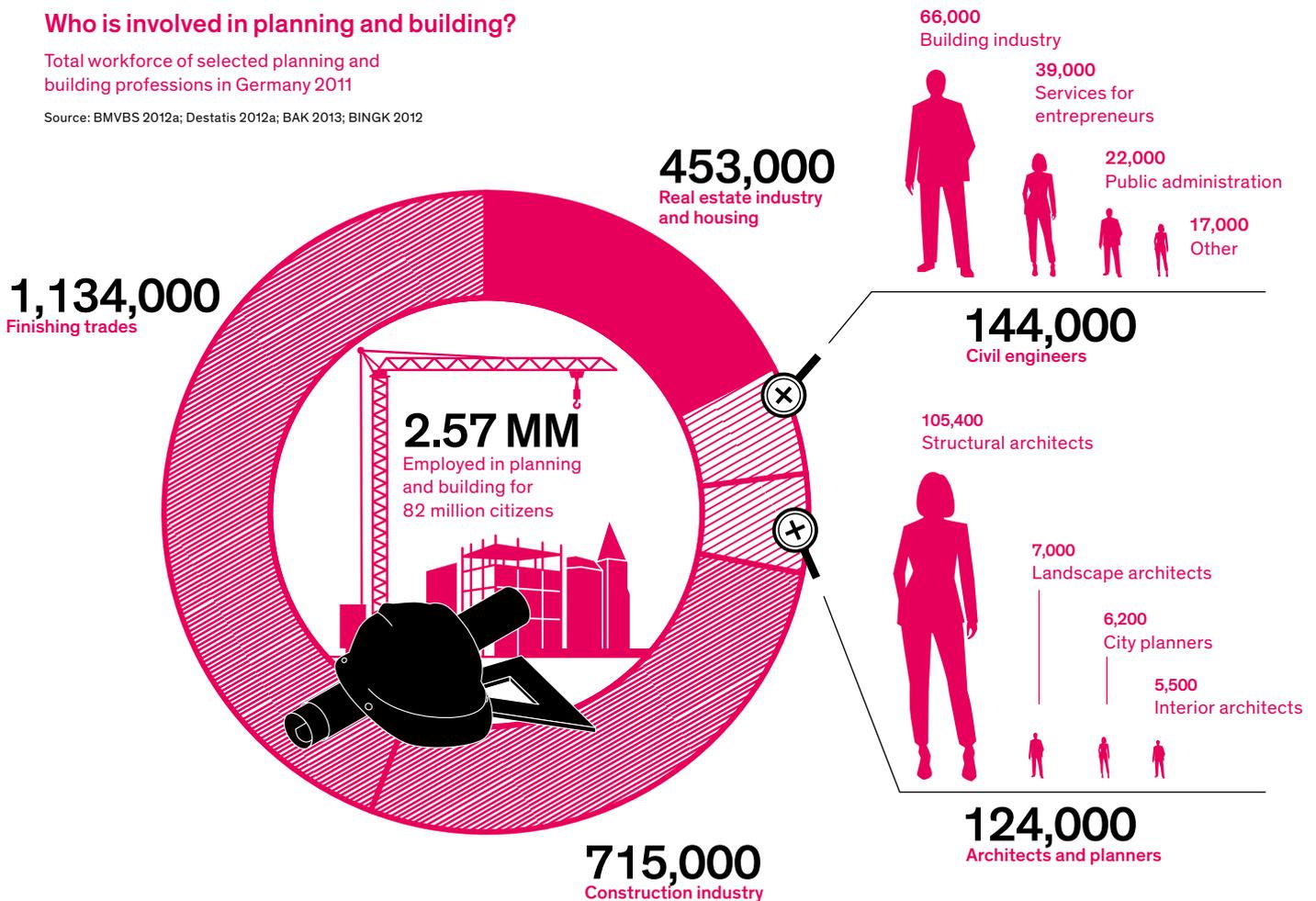
The Federal Chamber of Engineers’ professional code of conduct describes engineers’ profession as one “that places a high professional and ethical responsibility on them towards their fellow human beings and their natural livelihoods – their environment”. Thus, planners, architects, and engineers are committed to the importance of high-quality planning and building and their responsibilities in the context of Baukultur.

The occupational image of planners has changed in recent years. In traditional fields – such as implementation planning and construction management – they are in competition with project managers and developers. In addition, moderating and mediating communication between those involved in the building process are increasingly moving into the foreground. In addition to issues of participatory planning and building, there is also an expansion of the profession in the direction of social planning and social urban development, whereby more professional fields – such as neighbourhood manager – are appearing. Thus for building and planning professions, good project management becomes an issue of the process and the accompanying facilitation between involved stakeholders. All of this places new demands on the design of education and training.

Who is involved in planning and building?

Total workforce of selected planning and building professions in Germany 2011

Source: BMVBS 2012a; Destatis 2012a; BAK 2013; BINGK 2012



However, the more important personnel group in building is the construction industry: Every seventeenth labourer in Germany works in this sector. According to calculations by the Deutsches Institut für Wirtschaftsforschung e. V. (DIW Berlin, German Institute for Economic Research) on behalf of BMVBS, a total of 1.85 million people in the German construction industry primarily work for small companies with fewer than ten employees. Employing over 60% of workers, building completion dominates here, and is thus the part of the construction industry primarily engaged in the provision of maintenance, renovation, and refurbishment measures. The importance of the existing building stock versus new building becomes visible here again.

Training and Placement

Architecture, cities, and planning processes and their design are meanwhile subjects of highly different educational formats. At present, 128 universities/colleges across Germany educate professions relevant to Baukultur: e.g., architecture, urban planning, professional engineering, construction industry, and art. Academic training is supplemented by 70 institutes and academies. The demand for places to study in architecture, civil engineering, or spatial planning has greatly increased since 2008. Universities have to accommodate increasingly more students – and with a constant or reduced teaching staff. Similarly, the courses are increasingly focused on interdisciplinary, professional-integrative thinking, which is extremely important in practical activities in order to deal appropriately with the complex interconnections of Baukultur issues. With exemplary approaches, such as the project “InterFlex” from Fachhochschule Potsdam, interdisciplinary exploration is structurally anchored with the specialist disciplines of the social services, architecture and urban planning, restoration, cultural work, and design.

On a broad scale, Baukultur education is gaining in importance beyond the training of building and planning professions, due to increasingly desired and demanded public participation in building projects. However, the participation of citizens in planning their environment requires an understanding of planning and building processes, including awareness for both design aspects as well as framework-setting influence factors. Public relations and architecture communication can make a difference in this context. **An affinity for planning and building is certainly present in the population: during the educational years, nearly one in five people has harboured the desire to take a job in the field of planning and building.** Against this background, Baukultur education in schools plays an increasingly important role. Appropriate projects have a positive effect – such as the initiative “Architektur macht Schule” (Architecture in Schools) by twelve state architecture chambers and the Federal Chamber of Architects – thanks to the commitment of interested educators, associations, and specialist clubs. They are usually organised as part of afternoon working groups or project days. Among other things, the architecture educational infrastructure has recently been gaining ground because of this: In addition to the chambers, foundations – such as Wüstenrot, Siemens, Mercator, Montag and the Deutsche

Kinder- und Jugendstiftung (German Children and Youth Foundation) – are also developing transferable mentor models and teaching materials and linking school construction planning with Baukultur education issues. But examples from other European countries also illustrate that a much more extensive anchoring of the “subject material Baukultur” is possible: In Finland, for example, Baukultur education is integrated into the core curriculum, and the Austrian Ministry of Education supports outstanding educational projects. This shows how the integration of Baukultur topics in general education can take place on a broad platform. It is an essential foundation for awareness and active participation in the design of our built environment, and should therefore be given even stronger support in Germany.

Science and Research

The scientific examination of Baukultur takes place in Germany, in particular, at the Bundesinstitut für Bau-, Stadt- und Raumforschung (BBSR, Federal Institute for Building, Urban Affairs and Spatial Development) within the Bundesamt für Bauwesen und Raumordnung (BBR, Federal Office for Building and Regional Planning). Here pilot projects and practice-relevant studies directly related to Baukultur are carried out and evaluated through accompanying research on urban development funding, research activities in the framework of experimental housing and urban development (Ex-WoSt), as well as in the federal government’s general departmental research. The aim of the research is to generate knowledge for practice and to support managers in federal, state, and municipal authorities in their work for Baukultur on-site. On the other hand, basic scientific research – such as that sponsored by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) – in the subject area of Baukultur is rather the exception. Since 2000, the DFG funding database shows only five projects with the specific term “Baukultur”.

In fact, however, the research landscape on Baukultur is considerably broader. Even without putting the term itself in the spotlight, research institutions, universities, and other institutions in Germany are working on a variety of topics with reference to Baukultur. These are, for example: the Leibniz-Institut für Regionalentwicklung und Strukturplanung (IRS, Leibniz Institute for Regional Development and Structural Planning), with studies on the spatial design of the energy transition; the Akademie für Raumforschung und Landesplanung (ARL, Academy for Spatial Research and Planning), with research in the field of spatial effects of social development; and investigations by the Institut für Landes- und Stadtentwicklungsforschung (ILS, Institute for Regional and Urban development) on the development of existing building stock and symbolism of the built environment. Other institutions, such as the Wüstenrot Foundation and the Deutsche Verband für Wohnungswesen, Städtebau und Raumordnung e. V. (German Association for Housing, Urban and Regional Planning), are also actively researching topics relevant to Baukultur. Applied building research is also supported by the “Forschungsinitiative Zukunft Bau” (Research Initiative Future Building) by the Bundesministeriums für Umwelt, Naturschutz, Bau und Reaktorsicherheit (BMUB, Federal

Ministry of Environment, Nature Conservation, Building and Nuclear Safety). Research priorities for research promotion and contract research include, among others, energy-efficient and climate-friendly building, new materials and technologies, as well as sustainable building. Project-related funding is also provided by the Bundesministerium für Forschung und Bildung (Federal Ministry of Research and Education), for example, as part of the “Guidelines for Efficient Schools in Germany”, which were developed by the Montag Foundation, the Bund Deutscher Architekten (BDA, Federation of German Architects), and the Verband Bildung und Erziehung (VBE, Association for Education). Here, it becomes clear that not only the building and planning disciplines make a scientific contribution to research on Baukultur, but also related disciplines, such as cultural studies and sociology.

In concrete discussions on the topic of Baukultur, scientific literature was published in recent years, such as *Baukultur – Spiegel gesellschaftlichen Wandels* (Baukultur – Mirror of Social Change), by Werner Durths and Paul Sigel from 2009, and the volumes on Baukultur issued by the Federal Foundation of Baukultur, which brought forward the debates on Baukultur of public buildings, transport, and free space – albeit principally for an interested specialist public. However, even the term “Baukultur”, its substance, and its history can be better understood today than a decade ago because of the scientific examination that took place. Still, on other topics – such as the effect of Baukultur education, or the question of an economically measurable added value through Baukultur – only a few findings are available. Here, the need for research – above all, practice-oriented – persists.

Media and Society

The media have a central role in the communication of Baukultur values. Here, in addition to the regularly published, printed trade publications in the fields of architecture, engineering, and landscape and urban planning, supplementary or additional online offerings are increasing. In the national daily and weekly newspapers, however, architecture and urban design are only issues if there is a current angle. According to a study by the architecture psychologist Riklef Rambow, architecture-related reporting reaches laypeople only if it has a reference to the immediate physical environment. This points to the dominant role of local coverage in contrast to the national press. **According to a population survey, the local daily newspaper is still the most important information source about construction projects in a place of residence, even ahead of personal conversations with neighbours, friends, acquaintances, or colleagues. The communication of information by a city or municipality is clearly subordinate in the public perception, and even lies behind the importance of local advertising journals.** According to a study conducted in 2009 by BMVBS on participation in urban redevelopment, cities are aware of the importance of the local press. Ninety per cent of the municipalities indicated that the local press represents their most important medium to inform citizens about decisionmaking and the implementation status of urban redevelopment projects.

Furthermore, media coverage on planning and building issues reaches laypeople when the content becomes a major topic of general reporting –

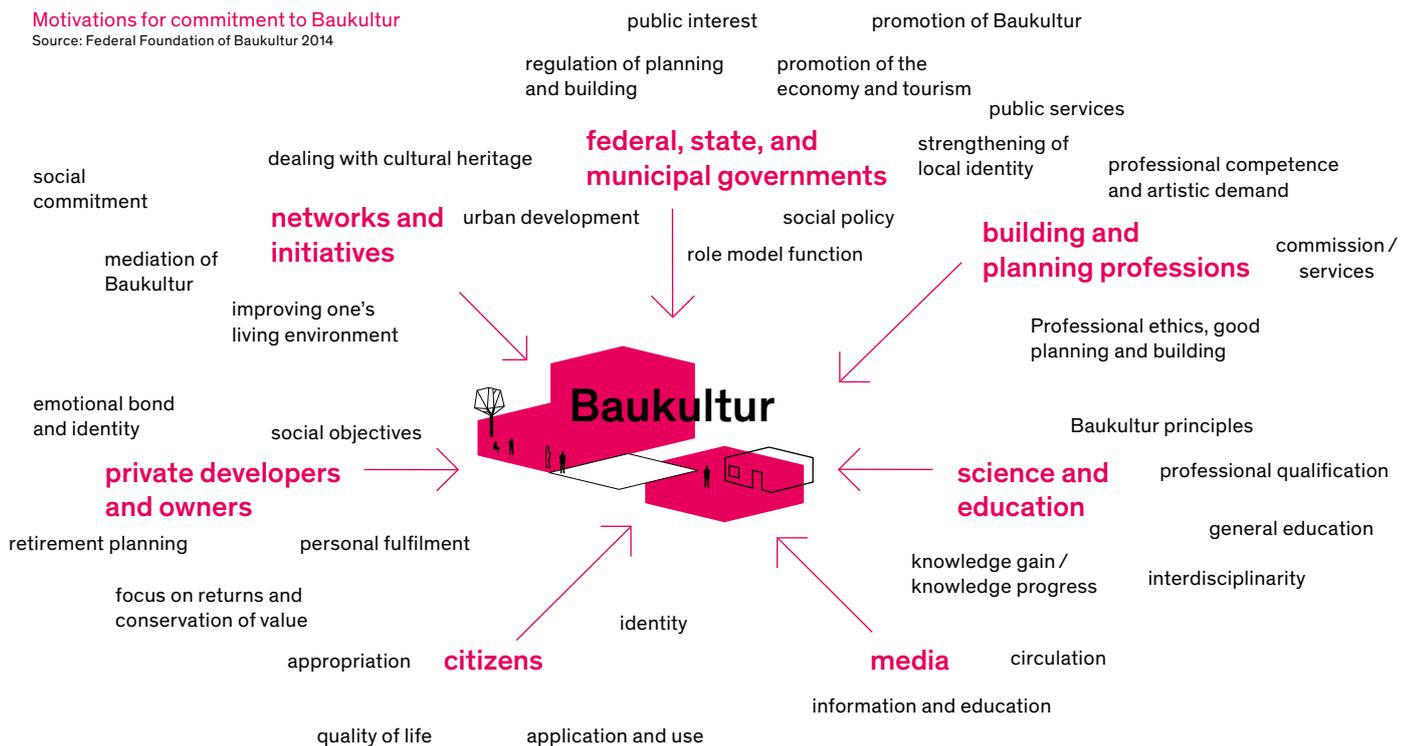
thus, they make the leap to “page one”. Here, the debate in the media often focuses on actual or alleged errors in construction projects, primarily in prominent major projects, in the sense of “only bad news is good news”. “Scandal”, especially financial – from Stuttgart 21, to the Elbe Philharmonic Hall in Hamburg, to the BER Airport– plays a special role in the media logic. Thereby, an appropriate form of dealing with Baukultur is lost. It is especially unfair to the importance of Baukultur for the breadth of planning and building and the everyday life of each individual.

Conclusion – Baukultur between the Priorities of Conflicting Interests

As a collaborative activity, Baukultur combines all stakeholders who have a say in the manner in which the environment is designed, shaped, and used. The first status report on Baukultur in Germany from 2001 contained the succinct sentence: “Baukultur concerns everyone, because the built environment affects and changes each individual citizen.” This phrase is still relevant, and in view of the many different stakeholder groups is expanded: Baukultur not only concerns everyone, but everyone makes Baukultur and influences and changes the built environment, even if the motivation and awareness for the implementation of Baukultur differs in the individual stakeholder groups. As broad as the outlined field of stakeholders may be, the field of different interests in which Baukultur develops is just as wide. Therefore, the culture of communication is all the more important as an essential part of Baukultur. Only by naming goal conflicts and negotiating – as well as integrating – the various interests, perspectives, and motives can Baukultur emerge sustainably.

Good reasons for Baukultur

Motivations for commitment to Baukultur
 Source: Federal Foundation of Baukultur 2014



Current Challenges for Baukultur

Globalisation, demographic change, energy transition, and technical and social innovations. The building industry is faced by enormous challenges due to current social changes. In particular, cities and communities have to respond to structural change in many respects with an adaptation of their infrastructures – with demolition due to shrinkage processes, through renovation and adaptation of existing stock to meet the needs of an aging population, and through new technical standards. But is the pending renovation of urban infrastructure actually going to be used to better design our cities? Are there any new and good answers to the demands of our time and the problems on the ground? It is an expression of Baukultur if new requirements are not only reacted to but are also seen as an opportunity to open the chapter “Future”, and thereby purposefully improve the quality of the built environment.

Changing Values and Technical Innovation – How Will We Live in the Future?

Working, living, shopping, leisure, and transport. The constant changes that are closely associated with the change of social and individual needs underlie status as embodiment of these central areas of urban life. Germany is on its way to being a postindustrial knowledge and information society. Milieu research also points to a continuing trend of individualisation and differentiation of lifestyles and value systems. Apart from the more “modern” milieus – such as the fun- and adventure-oriented “hedonists”, the performance-oriented “performers”, or the consumption-critical “socio-ecologically aligned” – there are other target groups that ascribe greater importance to the preservation of what exists.

For planning and building, the heterogeneity of life models is a challenge. A common denominator for the question of when a building, a city structure, or a process is of good quality can be difficult to find in light of different value systems. In addition, the differentiation of lifestyles is overlaid and supported by new technological developments. **Although only about 28% of municipalities see a very important or important aspect of Baukultur in technical innovation, technological enhancements operate structurally and spatially, and by all means have to be taken into consideration in deliberations on the quality of the built environment.** Technical innovations in engineering have a direct impact on the appearance of the built environment, for example, in the field of construction or material properties. The Internet – and its increasingly mobile applicability – also indirectly leads to changes in all areas of life.

Living and Working

In the working and business environment, technological developments and globalisation have led to a massive structural change. Many people live and work in multiple locations – i.e., they do not have spatially fixed workplaces, they are affected by the disintegration of residences and workplaces, or by the need to be active in constantly changing locations. On the other hand, there is the tendency to move away from the standard employment relationship in favour of new forms of employment, which create insecure to precarious forms of employment with part-time or contract work. According to the Bundesministerium für Familie, Senioren, Frauen und Jugend (BMFSFJ, Federal Ministry for Family Affairs, Senior Citizens, Women and Youth), in 2013 27% of all employees – and among these predominantly women – were employed part-time; according to findings by the Hans Böckler Foundation, in 2010, more than one-third of all workers were occupied in temporary employment and mini- and midi-jobs. This represents an increase of about 20% since 1991. In a survey as part of the micro census, however, only 5% said they deliberately chose temporary employment, according to the foundation. Due to insecure working conditions, the secure workplace is currently enjoying a position of importance, for which many spatial and thus Baukultur side effects are also accepted. Increased commuter traffic, second homes, and temporary living arrangements, as well as an increased demand for smaller apartments accompany this development. Thus the Investitionsbank Berlin predicts for the federal capital, for example, great demand in the rental housing sector, primarily for apartments up to 45 and 70 square meters, to a maximum of 100 square meters.

Through demographic change and the looming regionally varied shortage of skilled workers, new opportunities could present themselves in this context, because companies as well as the public sector are faced with new challenges: In the competition for skilled labour, not only do architecturally attractive work locations, flexible periods of employment, home offices, and other services have to be offered. Likewise, housing and living conditions – with well-developed, attractively designed residential and leisure offerings – offered in recruitment efforts for the influx of skilled labour are becoming increasingly important.

Shopping

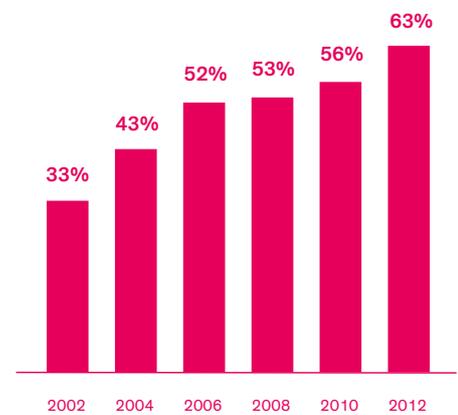
The retail industry and with it consumer behaviour are also changing under the influence of technological innovations. As part of an already massive structural change, the share of online sales in total sales of the industry is constantly increasing, and the purchasing behaviour of large parts of the population has changed dramatically as a result. The competence centre eWeb Research Center at Hochschule Niederrhein indicates that already up to 50% of customers inform themselves online before making an offline purchase. By 2020, the online share in the non-food sector is expected to rise from the current 9% to over 20%.

The urban impacts are significant. Today, the town and district centres with their pedestrian zones feature vacancies in many places due to the abandonment of old department stores – such as Horten or Hertie – which often triggers a downward spiral for vital centres. Also because of the continuously growing number of shopping centres and malls – especially

Changed buying behaviour

Share of Internet users who shopped online in the first quarter of the survey year

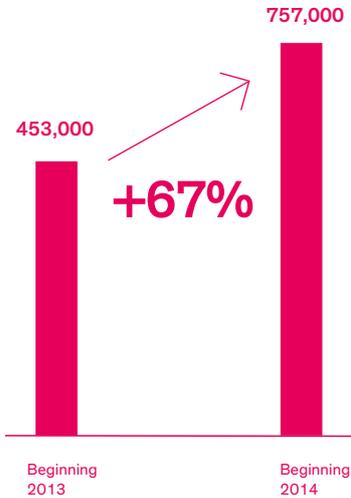
Source: Destatis 2013b



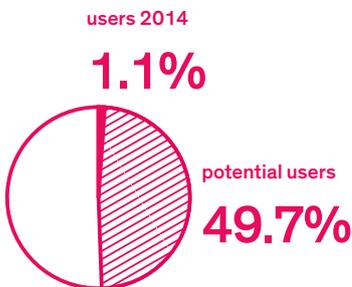
Sharing instead of owning?

Growth in the number of participants and potential in car sharing

Source: Federal Association of Carsharing



Registered participants in German car-sharing providers



Share of the population aged 18 and over who use or could use car sharing

when they are in peripheral areas – the city centres' loss of function is amplified. According to HSH Nordbank AG, the share of total retail space in inner-city areas and integrated locations is currently only 63%. Cities and municipalities thus face a big job if they want to retain the functionality and competitiveness – also in the interest of consumer-oriented services – of the central coverage area. On the other hand, they are also called upon to actively shape transformation processes. Above all, properly controlling the urban planning and design integration of often overscale, large malls and shopping centres is one of the biggest challenges for politics and administration. As a consequence, direct Baukultur effects ensue for the city and the cityscape.

Leisure

The increasing use of the Internet is also changing the leisure behaviour of the population, with a sometimes considerable impact on the built environment. A topic in trend research is the 25-hour society, which not only involves the intensity of work, but also countless and ever-available (online) offers – for training, shopping, and leisure – which people take advantage of around the clock. The Internet has created a parallel, independent virtual space that allows people to communicate with each other to establish forums and communities – functions previously held by public space. However, the Internet has not replaced the need to meet in real, physical space. Rather, it has led to improved ways to find allies for a special interest or to find a particular use and to draw attention to it. The success of urban trends – such as urban gardening, temporary “pop-up stores”, and joint “white boards” – is heavily dependent on becoming known on the Internet. Retreats and quiet areas, green spaces, and parks acquire a whole new relevance in this context. All of this raises the question of how public space can be made available for multiple user groups and which appropriation processes are effective in terms of Baukultur.

Transport

Likewise, mobility behaviour has changed through new technological possibilities. Trains, cars, and bicycles are the building blocks of an increasing inter- or multimodal transport behaviour. Combining means of transport each way (intermodal) or during the week (multimodal) aims at addressing increasingly complex daily and weekly schedules and leisure activities. In the city, public transport in conjunction with local mobility (pedestrian traffic and cycling), in particular, form the conditions for multimodal mobility. The trend “sharing instead of owning” supports these developments and is also increasingly becoming a central component of multimodality. This demonstrates the increasing demand of location-based and location-independent “shared services” – technology-based lending systems for cars and bicycles. In the field of car sharing alone, the number of users increased – according to the Bundesverband CarSharing (bcs, Federal Association of Carsharing) – within a year from 453,000 (in early 2013) to 757,000 people (early 2014), i.e., by 67%.

Intelligent Networks

The sustainability of urban areas is becoming increasingly dependent on the intelligent combination of different digital systems. In terms of an intelligent, networked urbanity, many large cities such as Cologne and Karlsruhe are rethinking – based on the motto “Smart/er Cities” – the task areas of municipal services, with the aim of improving the efficiency of processes. Strong focus is often on the areas of mobility, public administration (e-Government), as well as supply and disposal infrastructure (water, sewage, energy). With so-called smart grids, intelligent, decentralised power grids for power supply and distribution are created, which produce and deliver demand-oriented electricity. Here, almost every object in the public space can be integrated as power storage or charging station into the system. “Smart Technologies” and “Smart Material Houses” can be adjusted to changing environmental conditions using digital sensors and based on their material properties. According to the discussion paper Smart Cities – Grüne ITK zur Zukunftssicherung moderner Städte (Smart Cities – Green ICT to Secure the Future of Modern Cities) by the Bundesverbands Informationswirtschaft (Federal Association for Information Technology), approximately 21% of the federal government’s saving targets can be reached by 2020 through an intelligent use of buildings and intelligent transport systems for people and goods.

In terms of Baukultur, these developments offer varied opportunities to exploit spaces and buildings in new and more resource-efficient ways. Therefore, it is imperative that municipalities take the design aspect of new technologies into account. Also in existing neighbourhoods, there is both the possibility of user-specific energy storage and distribution, as well as new opportunities through energy-generating new buildings. At the same, however, the complexity of the infrastructure systems and therefore their use, and not least their vulnerability, are increasing. Baukultur plays an important role in shaping user-friendly interfaces, and thus in this regard, also in the quality of public spaces.

The technical changes have not only influenced the design of the built environment, but also the organisation and the acceptance of significant projects in terms of Baukultur. Thus, Web 2.0 and the social networks have become the basis for a new quality of debate on public planning and building projects. In addition to higher transparency, they also offer the chance to spontaneously and almost effortlessly initiate and use opinion-forming processes in interested circles of the public. **According to a survey, already 42% of the population surveyed – almost half – inform themselves about building projects in the city with the help of the Internet.** With this, public participation attains not only a new Baukultur significance in the municipalities, but in addition, it becomes necessary to rethink the planning and communication process of projects.

Diversity

Precisely because the individualisation of our societies and the diverse lifestyles do not allow comprehensive trends or typologies, there are also opposing trends occurring at the same time as rapid technological developments. Indeed, they only represent niches, but they can still have significant effects. Movements such as “Cittaslow” founded in Italy in



Climate Protection Concept Renewable Wilhelmsburg, Hamburg

Technical Innovations for Energy Transition at the Neighbourhood Level

The conversion of energy systems to a local energy supply based on renewable sources is a challenge. With the Climate Protection Concept Renewable Wilhelmsburg, IBA Hamburg shows how such a change can function. The spatial-energy model lays the foundation for an energy- and CO₂-neutral Wilhelmsburg. The Energy Bunker, the Energy Hill, the Energy Network Wilhelmsburg Mitte, and the renovated old buildings of the Weltquartier are exemplary projects that implement this plan. Many technical innovations in the field of power generation and energy storage have already been realised. Through the establishment of a 2,000-m³ heat accumulator – fed in part by waste heat from neighbouring industry and in part by biomass cogeneration and solar thermal energy – the Energy Bunker can supply up to 3,000 households with thermal energy. Wind power, solar power, landfill gas, and geothermal energy are harnessed on the disused Georgswerder landfill – thus new solutions for problematic city elements emerge. The installation of innovative energy supply systems is associated with new open space and recreational qualities; thus the heritage-protected flak bunker not only provides energy production and storage, but it also offers an exhibition and a café with an observation terrace at a height of 30 metres. The Climate Protection Concept is an exemplary model for a transformation process that has sustainably changed the face of the entire district.



Developer: IBA Hamburg GmbH & Behörde für Stadtentwicklung und Umwelt Amt für Umweltschutz – Bodenschutz/Altlasten & HAMBURG ENERGIE

Climate Protection Concept: Simona Weisleder und Karsten Wessel (Project Coordination), Julia Brockmann, Caroline König, Jan Gerbitz, Katharina Jacob (Collaboration)

Cooperation: IBA Consulting Committee on Climate and Energy and other experts

Basis: Study "Energetische Optimierung des Modellraumes IBA-Hamburg" (by EKP Energie-Klima-Plan GmbH, FH Nordhausen, and Ingenieurbüro Henning-Jacob)

Planning/Construction Period: Planning from 2007/ Publication Energy Atlas 2010 / Completion of the IBA Building and Energy Projects 2013

1999 – in which cities are committed to values of deceleration and regionalism – as well as a renewed interest in urban agriculture and organic products are responses to the increasing technologisation and high degree of complexity of everyday life. Among experts, more and more topics such as sufficiency, reduction, and thriftiness are also being discussed. These trends of changing values rank among the important contributions for a vibrant and diverse Baukultur and urban culture.

New opportunities for innovative and unconventional responses to issues of urban development and architecture arise from social trends. In the actual implementation of building projects, however, it is much more difficult to set out on new, innovative paths. Here, laws, standards, rules, and procedures create such a large number of guidelines that are complex and sometimes contradictory, but mandatory. As a consequence, the courage for innovation or structural experimentation is made more difficult or even impossible to find.

Demographic Change – Who Will We Be in the Future?

Demography

All population projections show that there will continuously be fewer people living in Germany. Already in 2012, the number of newborns was far too low – at 673,544 compared to 869,582 deaths – to stop this development, and optimistic forecasts for international immigration can compensate this balance only in part. In addition, the average life expectancy is increasing. The number of very elderly will thus also grow, like the proportion of older people in society at large. The Bundesinstitut für Bau-, Stadt- und Raumforschung (BBSR, Federal Institute for Building, Urban Affairs and Spatial Development) assumes that already by 2030 the percentage of over-80s will increase by 60%. Even today, about 20% of the population in Germany are older than 65, while only about 13% are younger than 14 years. At the same time, the Versingelung – i.e., the proportion of one-person households, single parents, and childless forms of partnership – continues to rise, a development that has and will have impacts on the housing market in particular. In new buildings, more flexible floor plans that satisfy this development are needed. Demographic change represents an enormous societal challenge that impacts and will further impact many areas structurally and spatially. Thus, with more and more seniors in society, the barrier-free extension and renovation of the existing building stock is increasingly urgent, because only 1% of the German housing stock is currently barrier-free. And in public space there is also an acute need for action. In the context of urban development programmes, the federal and state governments have basically committed to the design of barrier-free buildings and promote – under certain conditions – the barrier-free adaptation of public buildings and spaces; likewise, the KfW banking group provides funds for age- and family-friendly renovation of municipal infrastructure. Also in municipal competition processes, major new building activities, or renovation measures in municipal housing stocks, municipalities can effectively work towards accessibility.

Family

Many municipalities have also recognised that it is important, to make (inner) cities more attractive, not only for the older population, but also for families. Parents are among the most professional, often civically committed population groups, and with a high dedication to location have a socially stabilising effect: families very often want to remain in their neighbourhood when they are looking for a new apartment. With an active, family-friendly policy, municipalities can also use the age mix in the neighbourhood to prevent an exodus of families to areas of single-family homes on the outskirts of the city. An age- and family-friendly development of urban neighbourhoods does not have to be a contradiction. Both user groups are dependent on infrastructure services that they can reach over a short distance, if possible by foot, as well as a high amenity value and many usage possibilities in public space. The growing interest in multigenerational housing in cooperative housing projects opens up new possibilities for targeted age mixing, both in buildings as well as in urban neighbourhoods. Thus, the BBSR has determined in a quantitative survey that of 106 community housing projects realised as cooperatives from 2000 to 2012, 57 were multigenerational housing projects.

Poverty

However, in the course of demographic development, not only is a shift in the share of age groups in the population looming, a social division is also being observed. According to a recent study by welfare associations, the gap between rich and poor in German society is becoming increasingly wider. According to figures from the Statistischen Bundesamtes (Federal Statistical Office), 19.6% of the German population are considered at risk of poverty. This is especially the case in the cities, where the share of welfare recipients is particularly high. This development is not only a challenge to social cohesion, but also has Baukultur implications that trigger a need for action. Affordable housing and fundable building projects increasingly require municipal strategies, and public spaces – including infrastructure and mobility services – have to have offers ready for the more vulnerable segments of the population. The monitoring of social spaces is becoming an important basis in cities for recognising socio-political and urban requirements for action. The federal-state programme “Soziale Stadt” (Social City), part of urban development promotion, links directly to this. Integrated development concepts and neighbourhood management to improve the living environment are two of the many possible Baukultur responses to these developments. **Most municipalities are aware of their social responsibility: Every second municipality sees in social justice and balance a (very) important aspect of Baukultur.**

Migration

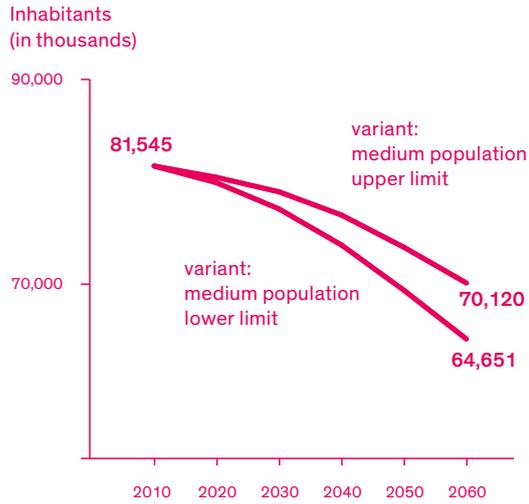
At the same time, demographic development in cities is characterised by an increasing proportion of people with a migration background. Between 1991 and 2006, immigration rates steadily decreased, since then they have increased again. In 2012, inflows of over a million people were confirmed most of the countries of origin were in Central and Eastern Europe. Integration and inclusion of these people, and productive cooperation is a key

Germany is becoming ...

... less populated

Germany's predicted population levels

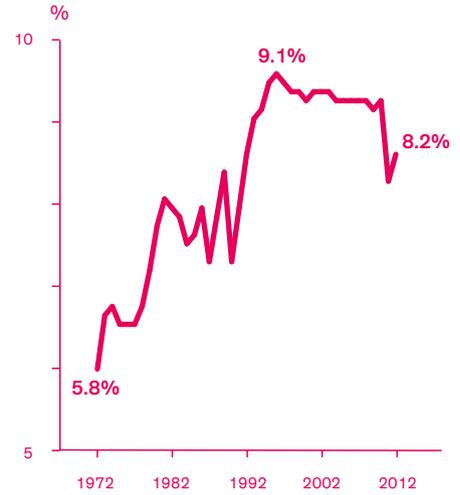
Source: Destatis 2009, BMI 2012



... more colourful

Share of foreign population in the total population

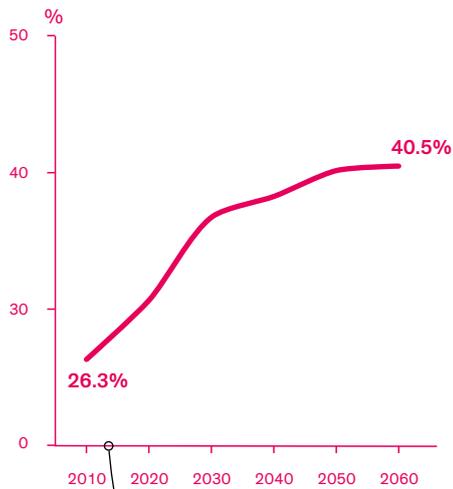
Source: Destatis 2009, BMI 2012



... older

Share of barrier-free residences in 2014

Source: Destatis 2009, BMUB 2014



2014

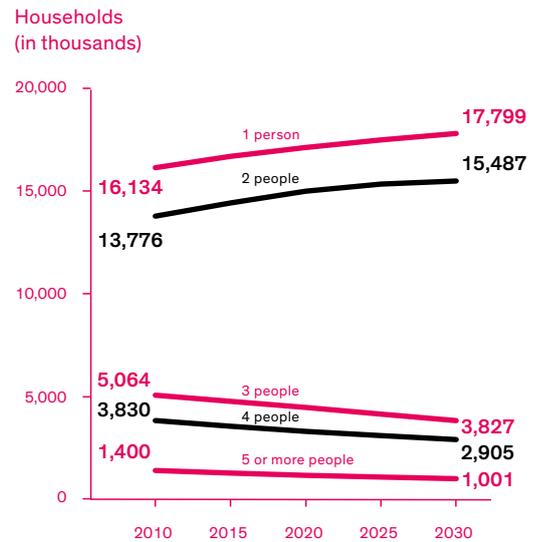
Share of barrier-free residences in 2014



... smaller in the households

Share of people aged 60 and older in the total population

Source: Destatis 2009, BMI 2012



socio-political task. Thus far, however, the Baukultur potential has hardly been discussed. Because this is about much more than the construction of mosques, upon which many neighbourhood conflicts symbolically fix. People with immigrant backgrounds bring with them very diverse cultural experiences and influences, which has positive effects on a vibrant Baukultur in Germany. If, for example, floor plans and apartment sizes reflect the different worlds of experience, a sense of identification and home can be better communicated. And that is urgently needed, because as residents and increasingly also as property owners, people with a migration background take on tasks in the care and maintenance of the building stock. Cultural differences are mainly visible in the different use of public space, which has to be considered in planning. The image of the city has thus been changed significantly, and because of this has become noticeably more culturally diverse and vibrant.

Climate Change and Energy Transition – What Conditions Will We Live under in the Future?

Energy Transition

The looming challenges of climate change for the spatial development in urban and rural areas have gained significant status due to the nuclear disaster at Fukushima in 2011 and the federal government's newly reformulated climate protection and energy policy as a result. In many ways, structural and spatial aspects are affected by this. Thus, federal and state regulations have led to energy savings, renewable energy, and enhanced requirements for technical design, not only in new construction, but also in the modernisation of existing buildings. In particular, this includes Erneuerbare Energien- und Wärmegesetz (EEWärmeG, Renewable Energy Heat Act) and the Energieeinsparverordnung (EnEV, Energy Saving Ordinance). In the existing building stock, however, not only do the legal obligations of the EnEV have an impact, but also the various funding programmes work as incentive – from the “municipal directive” of the Ministry of the Environment up to the support programmes by the Kreditanstalt für Wiederaufbau (KfW).

In terms of building-related energy savings, the next stage of development is already mapped out by the Building Directive of the European Union (EU) – the zero-energy house or energyplus house are not only ambitious flagship projects, but will be standard in the future. Residential or commercial buildings, factories, and swimming pools will, in addition to their primary function, be used as power generation facilities. Solar roofs have become defining design element of roof landscapes, especially in one- and two-family residential areas. According to the Bundesverbands Solarwirtschaft e. V. (German Solar Industry Association), a total of 16.5 million square metres of solar panels were installed alone in 2012 – a significant increase over previous years. In 2009, there were “only” about 12.85 million square metres.

Not disregarding Baukultur matters in this dynamic, ongoing transformation process is currently one of the major challenges. This is conspicuous, primarily in existing residential estates, especially in the historic



Schottenhöfe, Erfurt

Neighbourhood Vitalisation and Property-overlapping Energy Concept

After Die Wende (The Turn), the property on the Schottenkirche – with vacant lots and buildings from the 18th and 19th centuries in need of refurbishment – became an urban development problem in the heart of the city. For development by a private investor, a full-scale concept for residential construction was sought. It was supposed to appropriately consider the existing buildings – some heritage-protected – and sensitively close the gaps between buildings. In their design concept for the Schottenhöfe, the planners suggested new “urban elements”, which through their architectural language mediate between old and new. Through the creatively coherent filling of the gaps between buildings, the clear contour of the old block structure could be restored. A variety of floor plans and a compartmentalised green residential courtyard emerged. Through the shared stairwells, a building-overlapping energy concept could be realised. The new buildings exceed current energy standards, whereby the thermal insulation values could be lowered in the existing buildings in favour of preserving the façades with their defining effect on the cityscape. The old buildings benefit from the technological possibilities in the new building. The example of Schottenhöfe shows that property-overlapping concepts in closing gaps between buildings can make valuable contributions to an energy refurbishment compatible to the cityscape and to architectural design.

Developer: CULT Bauen & Wohnen GmbH, Erfurt
Architecture: Osterwold*Schmidt EXPIANDER Architekten BDA, Weimar
Landscape Architecture: plandrei Landschaftsarchitektur, Erfurt
Structural Planning: Hennicke + Dr. Kusch, Weimar
Planning/Construction Period: Peer-review process 2009 / Development plan + Building plan 2009 / Construction period 2010–2012 / Completion 2012

districts with Baukultur value. Making existing buildings energy fit is currently one of the most difficult tasks, because the potential threat to the appearance and the Baukultur values is obvious, given the climate and energy policy targets. **Already, more than one in five municipalities sees in the consequences of energy refurbishing a conflict issue for the area of housing and mixed neighbourhoods.** Required are “a sense of proportion” and “instinct”, a search for technical solutions compatible to Baukultur, as well as the courage to decide in the assessment of each case for the preservation of Baukultur substance and against the implementation of energy measures, particularly on the façades of buildings. The Hamburgische Architektenkammer (Hamburg Chamber of Architects) sets a good example here. A six-day training course as a “consultant for brick façades” qualifies experts. They can be approached by developers to preserve the defining cityscape effect of the Hamburg brick façades, also in the context of a necessary energy refurbishment.

In principle, the advantages of so-called grey energy are also to be included in the considerations for energy refurbishment: Compared with new construction, in refurbishment measures only a small proportion of new building materials are used, so that the energy consumption and CO₂ emissions for the production of building materials are far lower. Federal

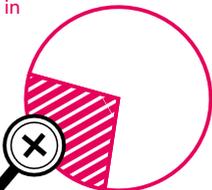
How should we deal with the existing building stock?

Energy consumption and the role of “grey energy”

Source: AGEB 2013; Destatis 2014c; DIW 2011; Fuhrhop 2013

Share of private households, industry, trade, and services in energy consumption in Germany 2012

27.8%



Mining, manufacturing, and transport

72.2%

of which for hot water and electricity

29.7%



of which for space heating

70.3%

Renovation, old building



95.8 kW/m² per year

Replacement, new building conventional



126.9 kW/m² per year

Replacement, new building approaching Passive House



118.5 kW/m² per year

Replacement, new building Passive House PhPP



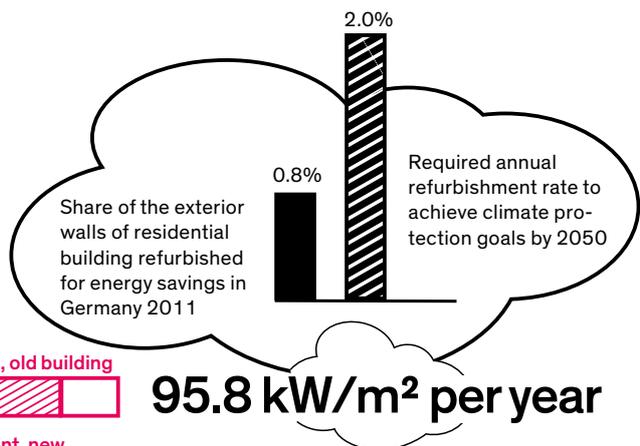
100.0 kW/m² per year

Old building, unrenovated (example case, building from the 1950s)



317.0 kW/m² per year

Energy balance in comparison: Renovation vs. demolition and replacement building Sample calculation for a row construction from the 1950s (Schillerstraße, Bremerhaven)



and state governments have contributed much in recent years – with pilot projects, work aids, and similar measures – so that Baukultur matters are considered in energy building refurbishments. However, it is still too early for a final assessment of their impact on Baukultur, because the annual energy refurbishment rate is at present only 0.8% of the building stock. Thus concern for the valuable building stock remains justified in view of the impending development of future refurbishment activities.

Nevertheless, the transformation and redesign due to the energy transition also holds opportunities for Baukultur. The objectives of climate protection give impetus to the improvement of building products and of the building trade in general. In addition, much untapped potential still lies in energy concepts that extend beyond individual properties and in neighbourhood-related measures. **At least two-thirds, to be precise 68%, of the surveyed municipalities see in property-overlapping concepts and nearly 30% in neighbourhood-specific energy concepts, for example, a possibility to qualify mixed neighbourhoods.** Also, closing the gaps between buildings with energy-generating new buildings can mitigate the refurbishment pressure on older building stocks.

Climate Adaptation

While municipalities in many places actively adopt measures relevant to climate protection, measures for climate adaptation are still comparatively restrained and are usually only tackled in response to natural disasters. Here, the federal government also attempts – through “municipal directives” and “support programme for measures on the adaptation to climate change” – to set financial incentives for a thematic engagement, because the consequential damages from heavy precipitation, windstorms, and increasing heat waves lie ahead for all municipalities in the federal territory.

After the great flood disasters in recent years, federal, state, and local governments have undertaken considerable efforts at flood protection. For example, the municipalities in Saxony-Anhalt affected by the floods in 2013 were allocated short-term funding from reconstruction aid funds from the Federal Republic of Germany and the Free State of Saxony. The states of Lower Saxony and Bremen also promote measures for inland flood protection, with the participation of the federal government and the EU. Moreover, the federal government has produced a flood protection primer, in which recommendations, amongst other things, are given for municipalities, developers, homeowners, tenants, architects, and engineers, as well as consideration for flood protection as part of building planning. A conceptual approach at the regional, citywide, or neighbourhood level – with urban structural as well building typological approaches – can sensibly complement conventional flood control measures along rivers, the creation of floodplains, and the restoration of bodies of water. Above all, it is a matter of not realising new construction areas in flood-prone areas. Because of the increasingly expected heatwaves, old towns and historic districts need to be adapted. Usually, the narrowly built and compact body of the city hardly have open and green spaces that regulate the temperature. Commercial areas are also generally characterised by a high degree of sealing, and the degree of sealing in German cities continues to increase. Between 1992 and 2011, the housing and transport area in Germany grew by 19%.

Thereby, land use is decreasing – from a daily average of 129 hectares between 1997 and 2000, to 81 hectares between 2008 and 2011 – however, it remains decisively linked to the health of the economy, so that a rebound seems possible. Additionally, 81 hectares still means a conversion of 110 football fields of mostly agricultural land to urban areas – per day.

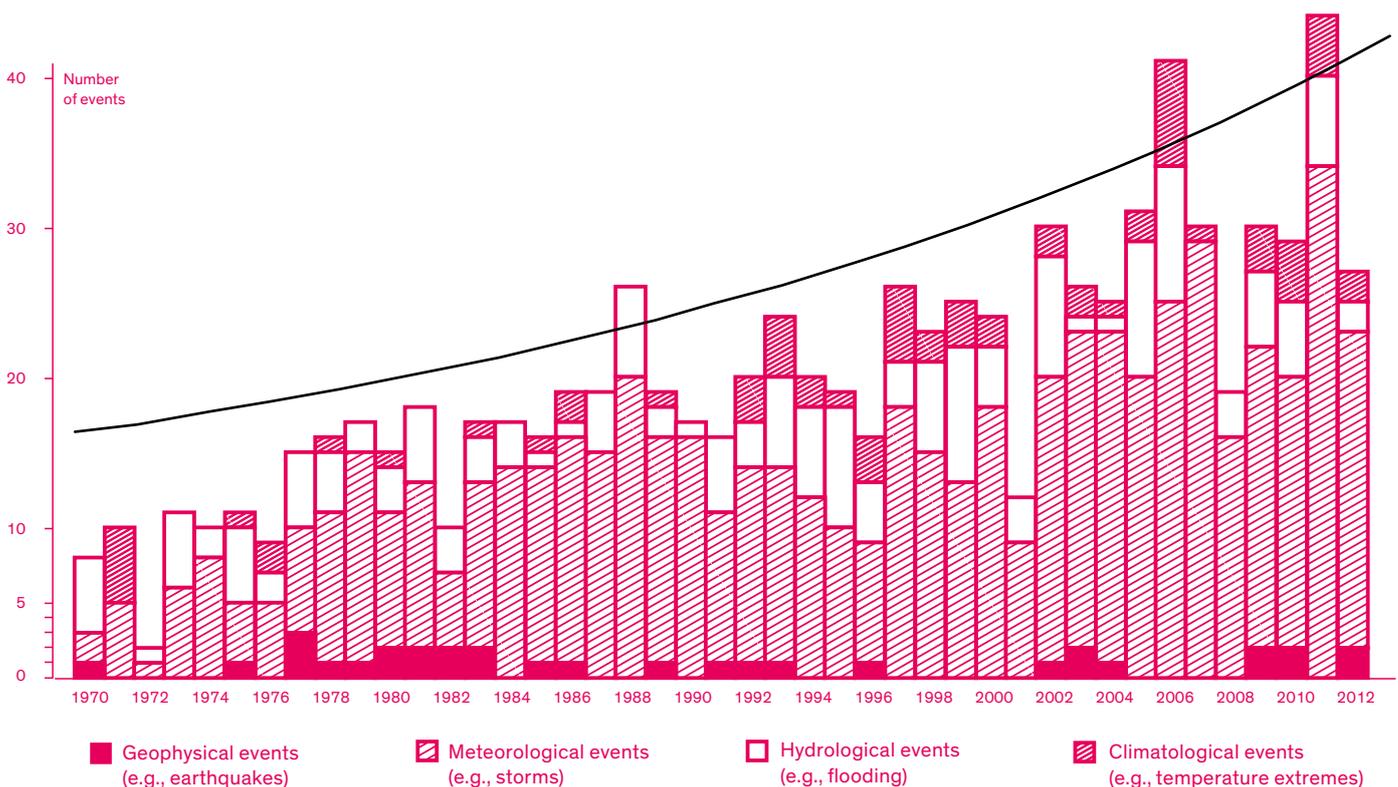
The German sustainability strategy includes reducing the consumption for housing and transport to 30 hectares per day by 2020. An important factor for this is city centre densification. Against the background of climate change, particularly fallow land and conversion areas will be suitable for this purpose, while existing green areas are indispensable for a proper balance of cultivated and uncultivated space in many places. **According to a municipal survey, almost every second municipality rates the densification, and thus the loss of open spaces, as a conflict issue in existing neighbourhoods.**

In this context, it is a key task of Baukultur to find appropriate answers to the needs and general conditions of the environment: The reflection of basic elements of urban development as the balance between built-up residential areas and open space, and the use of natural design elements – such as water, greenery adjacent to the street, or other plantings – contribute to an improvement in the microclimate in particularly affected locations, including in the short term. **In municipal practice, green space planning as upgrade has a very high significance: 85% of the municipalities surveyed see in the greening (very) major importance for the qualification of public space; the design of water systems is (very) important for 34%.** Energy-efficient air conditioning systems, both new and proven structural engineering and building products, the avoidance of

Extreme environmental events are increasing

Natural catastrophes in Germany 1970–2012, number of events with trend

Source: Munich Re 2013



heat-retaining façades and roof coverings, as well as façade and roof greening in new buildings complement the design repertoire for adapting existing residential properties to climate change.

The Public Sector – Too Big a Responsibility for Tight Budgets?

Hospitals, universities and schools, childcare and eldercare facilities, administrative buildings: The public sector is a developer for many buildings that are often in the public spotlight. The same applies to infrastructure projects: Whether it is a matter of roads, bridges, railway stations, or airports, the administration is under particularly critical observation. And it has the task of dealing responsibly with the underlying public service. Again and again, however, it turns out that the set budget – especially in exposed major projects – is substantially exceeded.

Planning Competence

Against this background, the federal government introduced in 2013 a “Reformkommission Bau von Großprojekten“ (Reform Commission on the Construction of Major Projects) both to reinforce true-cost pricing, cost transparency, and adherence to schedules for future large projects in the building construction and transport sectors, as well as to achieve the desired level of quality and functionality in the set time frame and budget, not least because the failure or delay of major projects in many places has led to a loss of confidence in politics and administration. **Among the general public, nearly 70% hold politics responsible for delays in public works projects, followed in second place by the developers carrying out the work, who are seen by 63% of respondents as primarily responsible.** In many places, major projects are triggers for cynicism. Thus, a satirical website suggested that a well-known Danish toy manufacturer had marketed a construction kit for the international airport BER, the Stuttgart 21 project, and the Hamburg Philharmonic Hall last year. Impracticable building instructions, subsequent requests for payment, and missing parts, thus the satire implies, makes the completion of the structures impossible. That a core of truth lies therein about the lost management competence in large projects is undisputed and can be found on page 724 in the present study commission report from the Hamburg City parliament on the Elbe Philharmonic Hall.

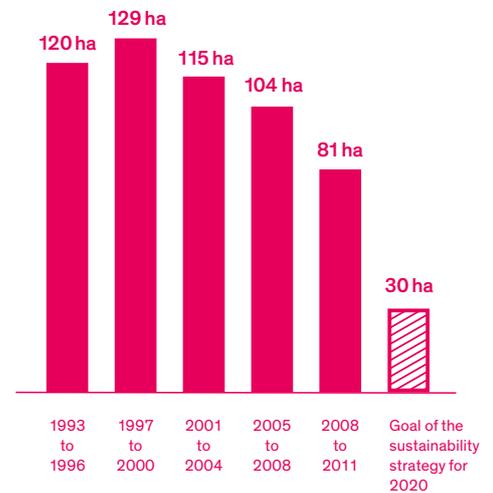
Refurbishment Backlog

In addition to the planning of large projects and other new building projects, the public sector is responsible for the modernisation and maintenance of public buildings and infrastructure. The focus here is less on the adherence to the budget, but on the maintenance and care. Thus, the annual expenditure of 56 euros per capita is made for the German rail network, and the costs for the German road network are 142 euros per capita. Nevertheless, the government cannot sufficiently carry out the necessary measures due to financial constraints at all levels of public spending.

100 football fields per day

New land use daily through housing and transport areas in Germany

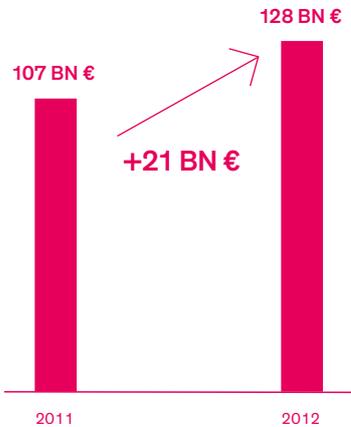
Source: Destatis 2014b



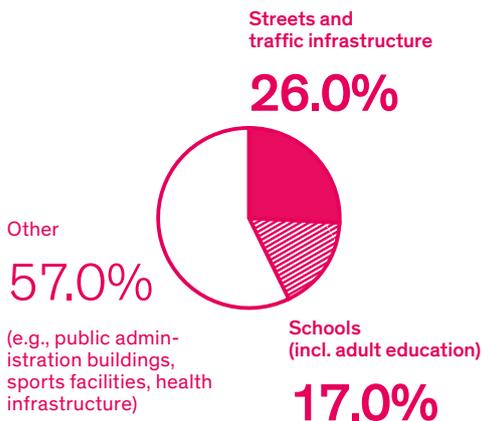
Investment gap is growing

Required replacement, renewal, and expansion investments in German municipalities

Source: KfW 2013



Growth of the investment gap in German municipalities



Investment gap 2012 in the municipalities (communities and counties) broken down by sectors

According to an estimate by KfW, the nationwide investment backlog resulting from this in cities and towns is currently 128 billion euros. At the municipal level, social and technical infrastructures are particularly affected. According to the KfW Municipal Panel, there is a shortage alone in the field of road and transport infrastructure investment of 33 billion euros. About 10,000 bridges (15%) in the municipalities have to be completely replaced according to a recent Difu study, however, for the foreseeable future this is only financially feasible in half of the cities.

Also, schools, universities, and sports halls in many cases not only have poor sanitary facilities, but are also falling into decline externally, and thus have an impact on identity and character, on social developments in the neighbourhood, and on the appearance of the cities. The neglect of buildings is increasingly developing into a problem area for municipalities.

For example, more than half surveyed see the maintenance deficit as a conflict issue. Ninety-two per cent of the population indicate that well-maintained and cared for buildings, streets, and squares are (very) important for their own living environment.

Financing

In view of pending investments, there are many opportunities, in the sense of Baukultur, not only to repair and refurbish, but also to achieve a better quality of the built environment as a result. The municipalities are supported financially by the federal and state governments. Already in December 2012, however, the final report of the commission Future of Transport Infrastructure Financing, appointed by the Minister of Transport Conference of States, figured the underfunding – especially for maintenance and operating services – at 7.2 billion euros per year, whereby the backlog of bridges is not fully accounted for. Not least in this context, a succession plan is urgently needed – at the latest by 2015 – for the unbundling funds expiring in 2019 and for the Municipal Transport Financing Act.

In the past, special programmes – such as the Konjunkturpake II (economic stimulus package II) – were essential for the maintenance of municipal infrastructure. To mitigate the impact of the global financial crisis on the economy, and to facilitate investments – including in the expansion and renovation of educational facilities and roads – resources in the amount of 17 to 18 billion euros were allocated in 2009. Also, in 2008 and 2009, the investment agreement for energy refurbishment of the municipalities' social infrastructure went into action, to assist them in particularly difficult budgetary situations. However, with the implementation of the stimulus package, Baukultur criteria were disregarded in many places, because the investments happened under extreme time pressure. Also, the additional funding enabled stronger investment activity only temporarily. In particular, little scope for technical innovation or experimentation remains under these framework conditions.

Cooperation

Therefore, civil society engagement and cooperation models with different stakeholders are playing an increasingly important role for the administration, to relieve pressure on them in urban development projects. Thereby, a clear political position on quality standards and design plans from politics

and administration ease cooperation between the stakeholder groups and the quality assurance of building projects. **In municipal practice, however, a lack of local political support on Baukultur issues often seems to be the trigger for difficult negotiation processes. Ninety per cent of the cities and municipalities indicate in this context that a strengthening and awareness of politics is (very) important if an improvement of Baukultur in the municipality is to be achieved.** Similarly, a lack of awareness of Baukultur issues is detected in private investors in municipal practice. **Also, 90% of the municipalities think that greater readiness or a greater interest among private investors is very important or important if an improvement of Baukultur is to be achieved in the municipality.** The figures suggest that municipalities must often accept Baukultur compromises, if private investment is supported or approved by advisors.

In order to ensure qualified and targeted consulting by private investors, sufficient human and technical resources in the administration are essential. Only with their own staff, can a fruitful collaboration succeed, as is promoted in the programme “Aktive Stadt- und Ortsteilzentren” (Active City and District Centres). Outside of funding programmes, cooperation with various private stakeholder circles does not yet seem to be firmly rooted in municipal practice. A lot of untapped potential exists here.

Synergies

If one considers the added value that can emerge through an attractive urban design, issues of Baukultur in many stakeholder circles should be reason for investment or cooperation models with the administration. **After all, almost 76% of the surveyed cities and communities deem Baukultur (very) important in reference to tourism, 64% for competition between cities. And half of the municipalities classify the economic importance of Baukultur as (very) important for retailers.** Keeping these synergies in view during the course of a prioritisation of refurbishment and repair investments for municipal infrastructure is vitally necessary. Only in this way can substantial resources, which have to be invested in public infrastructure in the coming years, actually lead to a sustained improvement in the quality of the built environment.

Conclusion – What Does This Mean for the Future of Our Cities?

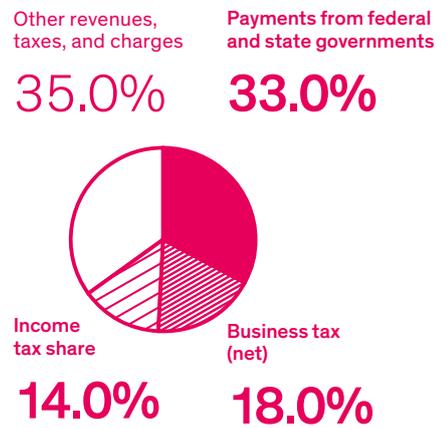
Growth and Shrinkage

Putting the focus on cities, Baukultur is not only the design of individual buildings, but a central task of urban development. Different lifestyles and values, the increasing importance of the Internet and the associated technical innovations, the many facets of demographic change, the requirements resulting from climate change, scarcity of funds and large public expectations – the trends, phenomena, and framework conditions raised here make it clear which complex and difficult challenges cities face. In addition, demographic, environmental, economic, and key social data from city to city show considerable differences. While in many places, the

Financial grants for municipalities are important

Municipal revenues in 2012
budget broken down by sector

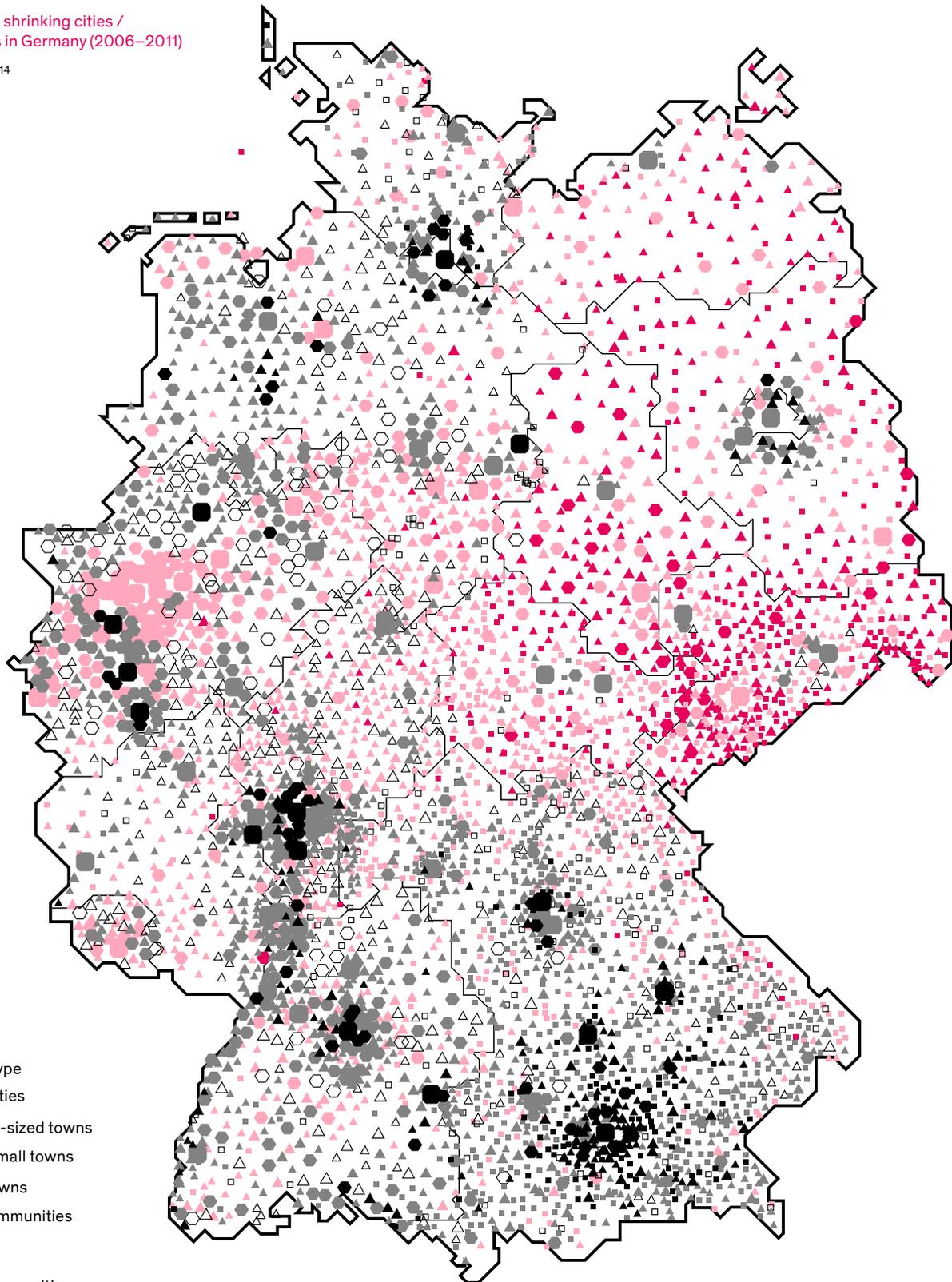
Source: DST 2012



Concurrence of uneven development

Growing and shrinking cities / communities in Germany (2006–2011)

Source: BBSR 2014



City and community type

- major cities
- ⬡ medium-sized towns
- △ larger small towns
- △ small towns
- ◻ rural communities

Growing and shrinking communities

- growing strongly
- growing
- stable
- shrinking
- shrinking strongly

Structural indicators considered:
 population development 2006 to 2011
 unemployment rate 2010/11
 total net migration 2009/10/11
 workplace development 2006 to 2011
 purchasing power 2010
 taxable capacity 2010/11

dismantling of infrastructure is already underway, and in outlying rural areas, the emergence of deserted villages – abandoned residential areas or industrial sites – depicts a realistic scenario, national and international arrivals tend to focus on economically strong locations and major cities. In the spatial distribution, it becomes apparent that vast areas of the Ruhr Area, the new federal states, and rural areas are affected by shrinkage, while many towns and major cities show stable or growing dynamics.

Cities, in particular are benefiting from a “renaissance of the city centre”, after the migration to the outskirts of the city and the single-family home “in the country” served as the dominant model of broad levels of the population for a long time. According to a 2010 report by the Deutsches Institut für Wirtschaftsforschung e. V. (DIW Berlin, German Institute for Economic Research), for several years major cities in Germany have become more attractive both as places of residence as well as business locations. Between 1999 and 2008, the number of city inhabitants increased by an average of almost 3%, while the population of Germany has shrunk since 2003. And it was found that since 2004, population numbers in the surrounding areas of cities is also decreasing, while the cities themselves are registering population growth. City centre residential areas – with the advantage of easy accessibility to service offers and recreational areas – offer the best conditions for quality of life from the perspective of a growing population.

Demand Pressure

Growth regions are labelled accordingly by a large demand for housing and commercial space. They feature a tendency toward high land prices with a usually very high return. But are these good conditions for Baukultur? Indeed, the dynamic offers opportunities for investment. Also, the change inspires creative forces that appear in start-ups and an increased willingness for civil society engagement. But the development pressure also bears risks. Planning and building processes in these municipalities are often under high investor and time pressure. This, in particular, can lead to ill-considered, exchangeable, or banal urban development solutions and architectural designs. In the same manner, the rapid provision of land-intensive residential areas on the outskirts of the city rarely leads to Baukultur qualities, but to overdevelopment. **The Baukultur hazards introduced by increased time pressure are shown in the figures of the municipal survey. Only 25% of all surveyed municipalities assess the quality of the current single-family home and row house construction as (very) good. In multi-storey rental housing, 29% of the municipalities rate the quality as (very) good, and 38 % for multistorey residential housing with condominiums.** In particular, the supply of affordable housing is not enough given the large demand in the prospering cities and urban regions. In new rentals – such as in Munich, Berlin, Frankfurt, and Dresden – a dramatic rise in the rent level is observed to some extent. Many municipalities are already responding with an intensification of new building activity, regulations for the construction of social housing, and rent control, in order maintain affordable rents, social justice, and above all, social mix.

Vacancy

At the same time, however, prospering cities also have shrinkage processes: In unattractive locations, large housing estates, and mono-functional areas,

targeted strategies and investments are also definitely needed to offset migration trends and vacancy. To a certain degree, vacant buildings and unused space rank among the requirements for healthy urban development. They form the buffer, so that the relocation and arrival of residents or businesses can be absorbed by the urban body. In shrinking neighbourhoods, cities, or regions, however, the fluctuation vacancy rate of up to 2.5% is considerably exceeded. Social and technical infrastructures are under-utilised. Their economy and to some extent their technical functionality are in question. Extensive vacancy rates in the existing building stock or the abandonment of large former industrial and military areas lead to urban development abuses. The ensuing decline in real estate prices works as a massive brake on investment, with significant consequences on the Baukultur image of the city. Building decay, so-called junk property, and downtrading of business locations are often the consequences.

Nevertheless, significant opportunities for Baukultur are also arising under the auspices of shrinkage. Firstly, reserve space is emerging for a cautious densification of the city centres. Also dismantling options have potential for improvement measures, for the restructuring of urban spaces, and for a city repair in the sense of conscious exploration of Baukultur. This can contribute to increasing the attractiveness of a neighbourhood or the entire city far beyond the actual area to be developed.

Experimental Spaces

For this purpose, brownfields and vacancies offer the opportunity to develop experimental spaces for temporary uses, new designs, or for reclaimed open space to emerge. In particular, innovative and creative milieus show a great interest in alternative, unfinished locations in growing cities, because creativity arises above all where potential spaces are available. Economic structural change with dereliction of former industrial, public (rail, mail, etc.), or military-related sites and infrastructures, as well as the perforation cities already heavily affected by demographic change have created space for manoeuvre.

As landowner, the public sector – from the Bundesanstalt für Immobilienaufgaben (BImA, Federal Agency for Real Estate Affairs) down to municipal governments – should be aware of these spaces, because their use by alternative and creative groups can become an important innovator for an image-forming transformation process in neighbourhoods, which also influence the cultural self-understanding of the municipality. Through the (intermediate) acquisition of brownfields, municipalities in particular can set targeted impetuses and plan or control developments. In terms of Baukultur, the “wait and see” and targeted approval of interim uses and appropriation processes are thus meaningful topics to be promoted, and through their experimental character, carry a lot of creative potential. However, new uses and user groups can also lead to a displacement of the original residents (gentrification). In shrinking cities and regions, derelict sites primarily provide the opportunity to create new open space qualities for residents.

Urban Development

With regard to the current challenges, all municipalities ask themselves which locations and neighbourhoods are fit for the future in terms of



Stadregal, Ulm

New Mixed Usage on an Old Industrial Site

The historic Ulm fire brigade equipment factory stands on a former industrial brownfield (conversion area) about five hectares large. The value of the 250-metre-long reinforced concrete frame was reaf-firmed through a mixture of housing, commerce, and culture, and comprises 115 units with a total floor area of about 20,000 m². The name "Stadregal" refers to the type of construction and stands for the spaces' openness of use, which allows a high degree of flexibility and customisation of the floor plans. The respective use concepts and floor plans were developed with the buyers and users, whereby rules were only fixed for the location of the supply and development cores and the exterior design. For better coordination between users and planners, an additional person was hired by the developer to coordinate the expansion. Thus emerged a compartmentalised mixed use of residential lofts of various sizes, an art school, a music school, and a gallery. In the conversion, the adjacent river was upgraded as a green corridor and made available to the public. The Ulm population's unfamiliarity with the area could be counteracted with a "placemaking process". Today, the Stadregal strikingly shapes the character of the vivid and mixed neighbourhood on the former industrial site.

Developer: Projektentwicklungsgesellschaft Ulm mbH

Architecture: Rapp Architekten, Ulm (BP 1–5) in collaboration with Braunger Wörtz Architekten, Ulm (BP 1–2)

Landscape Architecture: Manfred Rauh, Schmid-Rauh Landschaftsarchitekten, Neu Ulm

Construction Management: Alwin Grünfelder, Ulm Consult, Ulm

Planning/Construction Period: Concept planning from 2005/ Completion BP1 2007, BP5 2013



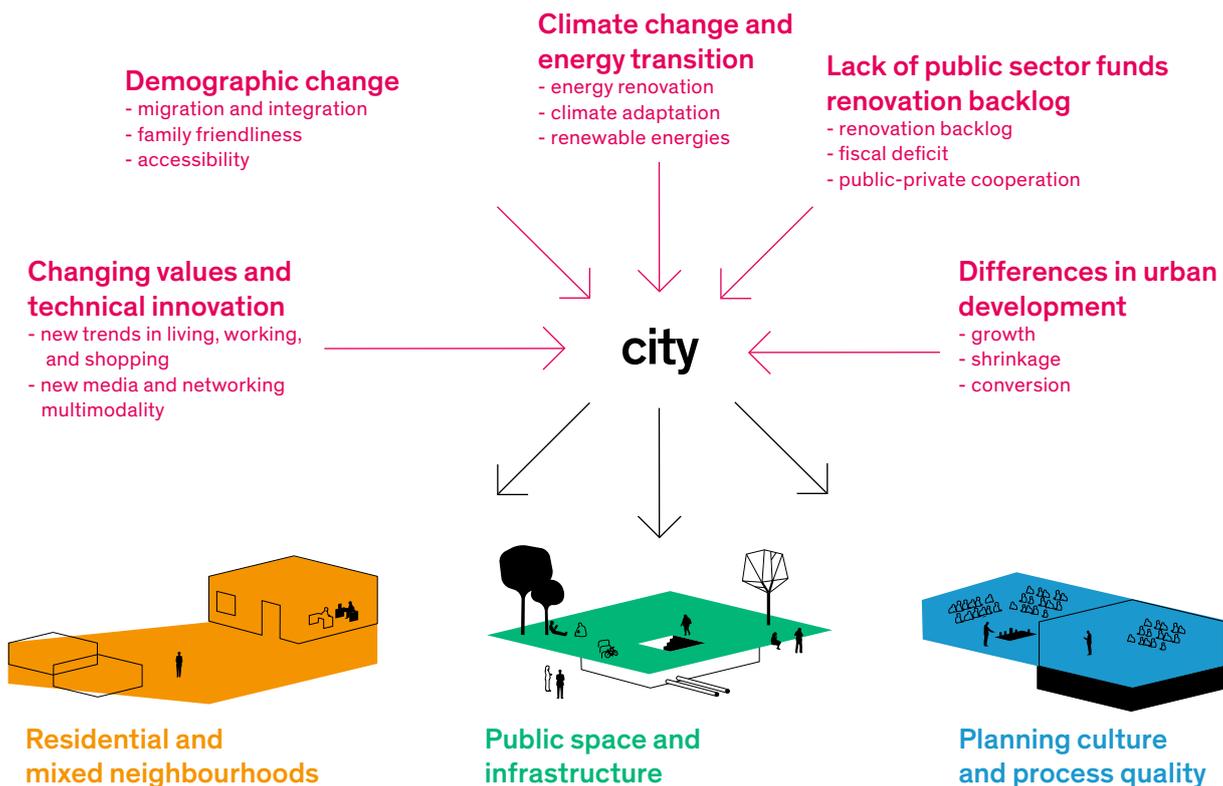
sustainable urban development. The concerned disciplines, synergies, and interfaces are so widely spread that the Baukultur qualities not only touch individual specialist departments, but all areas of urban life and responsibility. Accordingly, a growing confrontation with various future orientation issues is taking place in the framework of integrated development and design approaches, as expressed in the Integrierten Stadtentwicklungskonzepten (ISEK or INSEK, Integrated Urban Development Concepts).

Meanwhile, integrated urban development concepts in the federal-state programmes for urban development support are one of the general conditions for eligibility. With the programmes “Urban Development”, “Urban Monument Protection”, “Active City and District Centres”, “Social City”, and “Smaller Cities and Municipalities”, targeted funds are made available for maintenance and care of existing building stock, refurbishment and upgrading, adaptation of municipal infrastructure to demographic change, cooperation with private stakeholders and initiatives, as well as networking. Intensive coordination meetings with all stakeholders encourage quality assurance in the context of programme implementation. The current arrangement in the federal government’s coalition agreement, which increases the funds for urban development support from 455 to 700 million euros, is a clear signal in this context, and recognition of the immense challenges that the municipalities have to face, not least in the sense of Baukultur.

Challenges for cities of the future

Baukultur influences and fields of action

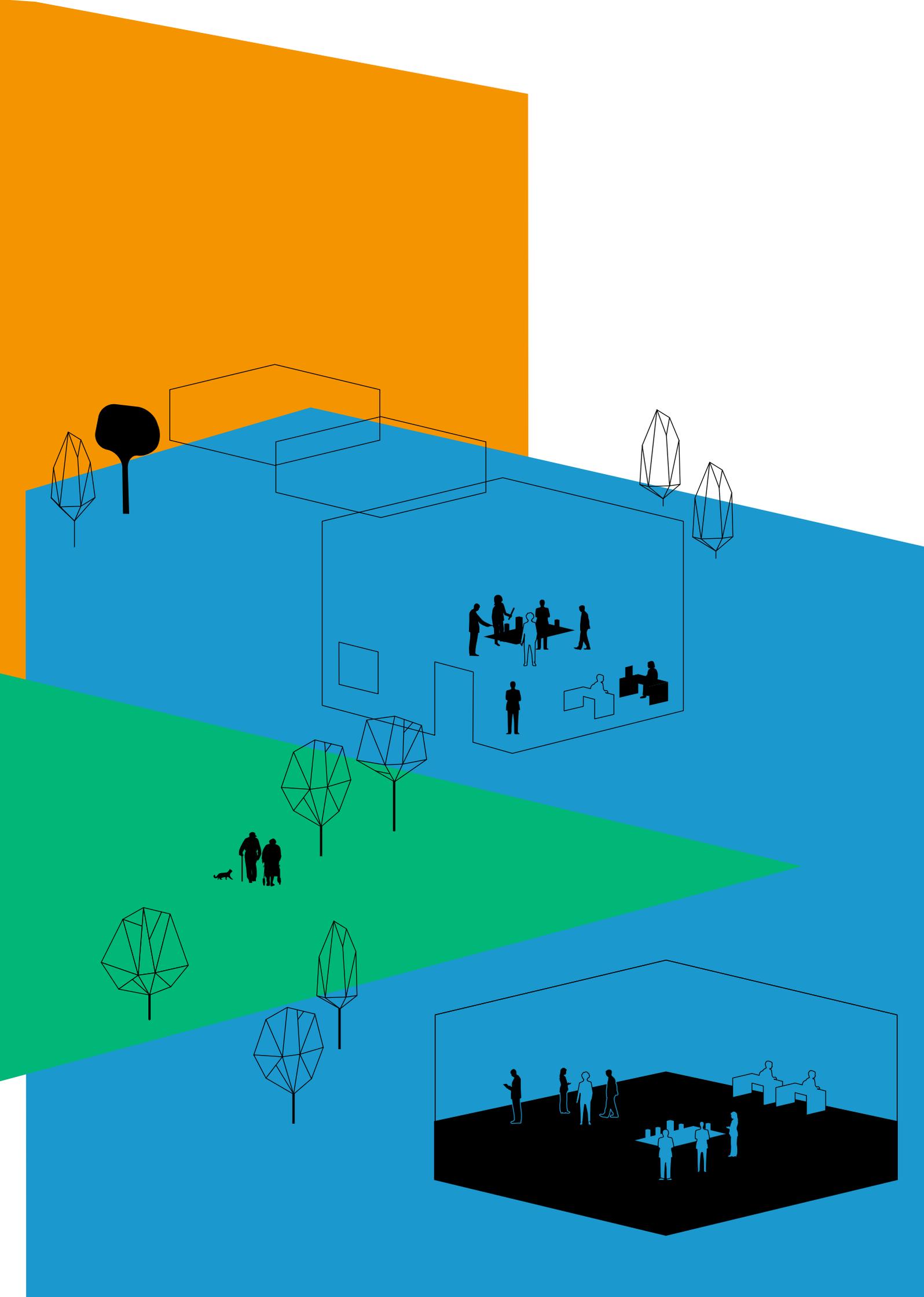
Source: Federal Foundation of Baukultur 2014



However, the quality of the built environment is not concentrated solely on programme areas. Rather, it is a matter of a comprehensive treatment of the existing building stock and the care and further development of urban spaces and buildings. Living in mixed neighbourhoods, public space, and technical infrastructure have emerged as the central factors that enable the promotion of urban spatial qualities. To be able to generate available potentials – and with them, numerous synergies – it is crucial to ensure the quality of the planning process from the outset. Thereby, more participation is not necessarily needed, but rather allowing for the right kind of stakeholder participation and inclusion of the population. Transferable success criteria and strategic approaches for the group of themes “Residential and Mixed Neighbourhoods”, “Public Space and Infrastructure”, and “Planning Culture and Process Quality” are accordingly subjects of the following focus areas.

Current Focus Areas of the Federal Foundation of Baukultur





Residential and Mixed Neighbourhoods

In recent years, the housing supply has become a central public issue, because despite the generally declining population in Germany, major cities in particular are continuing to grow. Changes in household structures and a rise in living space consumption per capita have led to shortages in the housing market. While elsewhere vacancy and deconstruction are on the agenda, the question of residential construction is being raised anew. The effects of the housing shortage can also be felt in the existing housing stock: The demand by affluent new inhabitants leads to displacement and gentrification. All of this triggers the need for action in municipalities. Therefore, the Baukultur challenge is to create and maintain attractive, vibrant, and socially stable residential neighbourhoods. Mixture – social as well as functional – is the key factor; the mixed neighbourhood is the guiding principle.

Good Arguments for Baukultur – What Distinguishes Mixed Neighbourhoods

The historic “European city” – with its compartmentalised property structure and variety of uses – serves as a role model for a rediscovered and widely accepted understanding of urbanity. It should not be overlooked here that the criticism of the poor, unhealthy living conditions – particularly in the historic Grunderzeit city, as based on the garden city movement and the Charter of Athens – was justified. Thus, it is a matter of the right mix, which promotes social stability, prevents poor housing and living conditions due to noise, air pollutants, or other emissions and hazards, and at the same time uses the potential and qualities of coexistence of housing, employment, services, and leisure.

Neighbourhood

The model of the compact, socially and functionally mixed city stands for urbanity and density, durability and robustness, cultural diversity, local identity and identification opportunities for residents, space for public encounters, and lively social interaction. Thereby, the neighbourhood is the living space frame of reference. Socially and functionally mixed neighbourhoods have a strong, shared sense of local identity and are characterised by lively social interaction. Meanwhile, it can be regarded as a consensus in specialist discussion across fields of action that the neighbourhood level is the central reference plane for urban development and Baukultur quality. For example, the state of North Rhine-Westphalia has focused its urban development policy on this with the programme “Heimat im Quartier”

(At Home in the Neighbourhood). **This assessment is supported by the majority of the municipalities surveyed: with a view to Baukultur, 87% consider the neighbourhood the most important spatial planning level.**

Social Mix

Mixed (existing stock) neighbourhoods are often characterised by a diversified offer and mix of housing types – a juxtaposition of different ownership structures and support (municipal housing associations, cooperatives, private owners, homeowners' associations), of rental and owner-occupied properties, and subsidised and privately financed stock. This diversity is also valid to ensure and to enable the opportunity for development of different lifestyles, through housing offers for demographically, socially, ethnically and economically different population groups in the future. **New residential construction in mixed neighbourhoods – and thus the addition to the existing building stock – is designated by about 70% of the municipalities as (very) important.** With regard to the overall goal of social mix, it is important that the existing population is kept in the district and not displaced, despite structural, energy, and Baukultur qualification of a location.

Design and Functional Diversity

The design variety of the built environment is of central importance to the vitality of neighbourhoods. Particularly in residential construction, a good design has to be a general requirement to improve the quality of life. In the qualification of existing neighbourhoods – besides the upgrading of existing building through design or other interventions – the expansion of the existing development and available uses also play an essential role. Thereby it is a matter of – regardless of the building period from which the structure originates – a combination of old and new, a juxtaposition of building stock and new architecture worthy of historic preservation or Baukultur value, as well as high-quality densification through new buildings types. **From the perspective of more than 90% of the municipalities, aesthetics and design, local identity, as well as the safeguarding existing building stock worthy of protection are (very) important criteria for Baukultur. At the same time, however, the Baukultur quality of current building projects is judged overall as mediocre, and alongside residential construction – above all by commercial and retail building – to be rather low.** According to the study on living trends 2030 by the GdW Bundesverband deutscher Wohnungs- und Immobilienunternehmen e. V. (Federation of German Housing and Real Estate Enterprise), however, a visually appealing design of the building is very important for residents – after all, three-quarters of respondents expect this as standard. Also to be taken into consideration is the sometimes significant influence of energy refurbishment and modernisation measures on the design – for example, due to thermal insulation composite systems. The implementation of such measures should not lead to the uniformity of buildings and design atrophy. An equally important criterion for the quality of mixed neighbourhoods and their vitality is functional diversity. This includes, among others, the integration of supply structures in the neighbourhood and the general revival of the buildings' ground floor zones.

Weltquartier, Hamburg

Refurbishment in a Multicultural Neighbourhood

The Weltquartier is a former dock labourers' neighbourhood from the 1920s and 1930s in Hamburg Wilhelmsburg, with more than 800 residences and 1,700 inhabitants from over 30 countries of origin. Due to the poor structural condition of the buildings – with outdated floor plans and poor open space quality – there was considerable need for renovation. As part of the IBA Hamburg, the conversion of the Weltquartier was begun, whereby the goal had already been formulated in 2007 to maintain the rental prices and the population structure and to consider the needs of the residents. With the help of multilingual “local historians”, activating interviews were conducted and an “inter-cultural planning workshop” organised. The results are included in the list of recommendations for the urban development competition. In seven years, a total of 750 residential units were newly built or renovated, and 35 commercial units were created in a commercial courtyard. About 40% of the former 1,700 residents of Weltquartier still (or again) live directly in Weltquartier and another 45% remained in the Wilhelmsburg district. Roof insulation, curtain façades, and a composite heat insulation system improved the energy parameters of the estate. “Garden Islands” provide opportunities for private or shared gardening. The Weltquartier Hamburg offers transferable approaches for a resident-oriented refurbishment for increasingly multicultural neighbourhoods.

Developer: SAGA Siedlungs-Aktiengesellschaft, Hamburg / GMH Gebäudemanagement Hamburg GmbH
Architecture: kfs Krause feyerabend Sippel Architekten, Lübeck (1st Prize) Knerer+Lang Architekten, Dresden/Munich (2nd Prize)
Landscape Planning: Andresen Landschaftsarchitektur, Lübeck
Project Coordination: René Reckschwardt, IBA Hamburg GmbH
Planning/Construction Period: Intercultural Planning Workshop 2007 / Urban Development Competition 2008 / Ten building phases 2009–2015



Granularity

Generally speaking, the more fine-grained and diverse the functional mix (vertically and horizontally) is, and the more compartmentalised the building structures are, the higher a location's quality of life usually is; this also applies analogously to the degree of social mix of different population groups. Also, in view of the fact that large development areas – through conversion or transfer of functions – will be available less frequently in city centre locations in the future, a compartmentalised subdivision is preferable to large-scale structures, if vitality in the neighbourhood is to be achieved through a variety of use and a compatible use density. In the compartmentalisation, it is not primarily a matter of individual buildings, but always of the consideration of the block or neighbourhood level – for example, through property-overlapping concepts or integrated frameworks. **Property-overlapping concepts are viewed by more than two-thirds of the municipalities as (very) important for the qualification of mixed neighbourhoods.**

Urban Density

Many inner-city neighbourhoods are characterised by a high degree of urbanity, which also emerges through density, among other factors. It can therefore be a criterion of Baukultur quality. The initial results of a current research project at ETH Zurich suggest that urbanity – and the prerequisite for a functioning mixing and walkability of neighbourhoods – is only given above a floor-space index (FSI = ratio of the total floor area to land area) of about 1.5. But building density in city centre neighbourhoods is not a guarantee per se for the emergence or retention of mix. Therefore, a precise assessment of the needs in each neighbourhood, as well as the encountered urban development situation, is of particular importance when it comes to complementing the existing building stock.

Ground Floor Zone

The ground floor is the building's important contact zone to public space. Densification offers significant potential to improve, strengthen, or stabilise the functional mix in the neighbourhood. Thus, a population increase can contribute to a boost in buying power, and with this to the required "critical mass" in the retail sector. Not only in new construction does the revival of the ground floor – through social, cultural, or commercial use – play an important role in this context. **From the perspective of municipalities, such a revival of ground floor areas is the criterion with the greatest importance in strengthening neighbourhoods: 73% consider a bustling ground floor zone (very) important.**

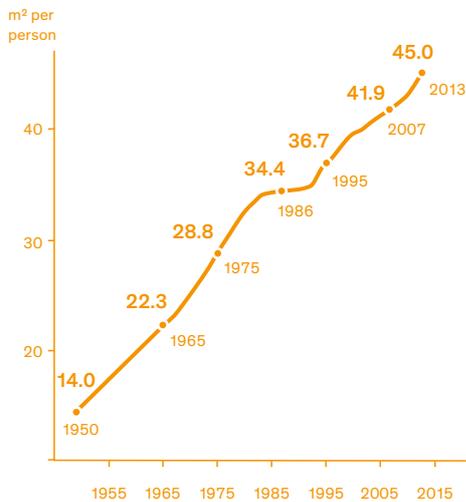
Spatial Structure / Public Space

The often smooth transition from private, semi-public and public areas – with the opportunity for public encounters and shared spaces – is also among the qualities of mixed neighbourhoods. Thus, a key feature of Baukultur quality in mixed neighbourhoods is also the amenity value in public space, which contributes to vitality and identity formation. Building density and (use) and openness of spaces must therefore be taken into consideration equally in the classification of mixed neighbourhoods.

Living in more space

Development of living area per person

Source: INSM 2009, Destatis 2012b



Caution

The addition to existing building stock through densification or insertion of new buildings at the level of the block or the neighbourhood must be made cautiously. Here, it is a matter of coordinating the various existing and complementary uses with another, to avoid or at least minimise the emergence of conflicts. In addition to the analysis of the neighbourhood's needs – adapted to framework conditions and scope of the project – timely information, activation, and participation of neighbourhood residents, result-oriented moderation between the different stakeholder interests, and the joint development of solutions are of considerable importance for acceptance.

Status Quo and Current Developments

Mixed city centre neighbourhoods are not static, but dynamically changing social spaces. Thus, mixture is primarily the result of market and negotiation processes within urban society, for which the built environment must provide services.

Housing Market

The housing shortage in prospering cities has multiple causes: Since the mid-1990s, new residential construction has fallen to historically low levels, and only recently begun to rise again. Both the stakeholders in the housing market, as well as many cities, underestimated the demand. The distinct rise in average living space consumption per capita – from 14m² in 1950 to 45m² in 2013 – affects the demand side as an additional driver in the housing shortage. This is accompanied by a steady increase of one-person households in cities; the average household size is constantly decreasing.

In addition, changed framework conditions have repercussions on the problematic development of some submarkets. This includes, in particular, the liberalisation of housing policy, the federal government's retreat from promoting housing construction, and the privatisation of building stock held by municipalities or the public sector. This is read, for example, in the "erosion" of social housing stock with rental or tenant control agreements: Their inventory in Germany dropped from about three million at the beginning of 1990 to 1.66 million residences in 2010. This corresponds to a share of only 4% of the total housing stock. As a result, the municipalities' control options are significantly restricted in the area of the social housing supply.

The housing shortage also has an effect on real estate prices and rent levels. According to the Bundesbank, the purchase price for residential properties prices in 2013 have continued to increase significantly due to the continuing high demand: In 125 German cities examined, the average increase amounted to 6.25%, and in the seven largest cities 9%. In total, urban residential properties have become at least a fifth more expensive since 2010.

Similar to purchase price development, the average rental rates – especially in large cities and towns where there is an increased demand by students – continue to rise significantly. According to the Deutsches

Institut für Wirtschaftsforschung e. V. (DIW Berlin, German Institute for Economic Research), new rental contracts increased by up to 9% last year. The rental trend is also exacerbated by the increase in ancillary rental charges, whose rise in recent years was significantly higher than the net rents and the cost of living. According to BBSR, the so-called warm additional costs have risen by 25% since 2005. Similar to demand pressure, however, rental price development often exhibits major fluctuations. In many cities, a juxtaposition, partly spatial, of vacancy and use pressure can be determined, whereby the demand – for example, in inner-city neighbourhoods – is normally higher than in peripheral areas and in the Gründerzeit buildings higher than in the large residential estates of the 1960s and 1970s. Regardless of demand pressures, further developments – such as investments in energy refurbishment of buildings and renovations suitable for the elderly – contribute to rising in rental prices.

Mixed Neighbourhoods

Mixed neighbourhoods are characterised by a resource-saving settlement pattern with little (or a small amount of) traffic. Distances are reduced (model “City of Short Distances”) through neighbourhood services and good access to social infrastructure offers. Their strengthening is accompanied by a reduction in urban sprawl and land use. The type of “classical” conflict situation, in which the coexistence of residential and commercial uses leads to massive disruptions and mutual constraints, is scarcely found in German cities. Changed site requirements for businesses, relocations, changed and more resident-friendly production and working methods, as well as tertiarisation, have reduced the potential for conflict. **The vast majority of citizens polled do not feel affected by the disruptive effects associated with lively city districts – with the exception of traffic noise.**

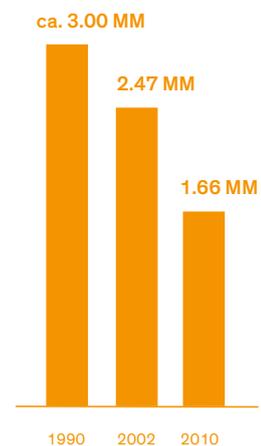
The reurbanisation trend since the late 1990s is largely due to the advantages of city centre living. Incentives are, among others the density of social infrastructure; short distances between work, child care, facilities and housing; rising mobility costs; change in housing preferences; or the increasing overlap of employment and private sphere. **After all, for 96% of citizens polled, good accessibility to facilities, and for 70% a lively urban district or a city centre with shops and restaurants are (very) important.**

According to a 2013 study carried out by the GdW, housing models will further differentiate in the future and become more diverse. Environment, sustainability, health, and balance, the residence as a haven is gaining relevance as a life plan. Against the background of an interest in being close to nature and the simultaneous desire to live in central, inner-city locations, the importance of qualities related to outdoor areas in a residential location with open spaces, garden, balcony, or terrace is also growing. Also, the presence of “appropriation areas” and possibilities for the self-development of urban culture are increasingly in demand. The GdW study also notes that the commitment to location up to (very) old age or the desire to remain in the house or the neighbourhood is becoming increasingly important for more and more people. Therefore, the proximity and easy accessibility of different social infrastructure and care facilities – regardless of the stage of life – play an important role across all residential models. Mixed neighbourhoods form precisely the framework to serve the diversity of these living preferences.

Erosion of social housing

Number of subsidised rental units in Germany that are subject to rent and/or tenant control according to the Second Housing Act/WoFG

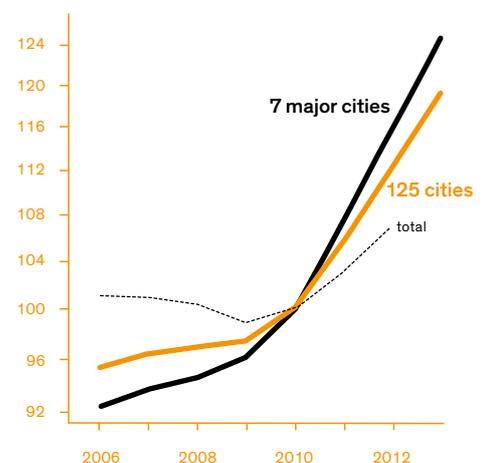
Source: Deutscher Bundestag 2012



Urban living is becoming expensive

Housing price indices for town houses and condominiums (2010=100)

Source: Deutsche Bundesbank 2014



Demand for mixed inner-city neighbourhoods also exists among businesses – usually small and medium-sized enterprises in the fields of trade, hand-crafts, services – that value the proximity to clients, inexpensive floor space, and the diversity and vibrancy of the neighbourhood as a locational advantage. According to the results of “Nutzungsmischung im Städtebau” (Mixed Use in Urban Development) – a research project conducted from 1995 to 2000 by Experimentellen Wohnungs- und Städtebaus (ExWoSt, Experimental Housing and Urban Development) – mixed use can be attractive to investors because in this way the risk of a downward spiral of demand fluctuations can be minimised. At the same time, the image of mixed-use locations is attractive for marketing. Mixture can therefore lead to the increase in property value.

Nevertheless, there are also a number of aspects that encourage the opposite trend towards segregation. In the research project mentioned above, it was shown that investors often follow the supposed interests of users and thus promote segregation: With potential renters, they accept the demand for undisturbed living, and with businesses, the desire not to be limited or “disturbed” by residential uses. In addition, due to higher planning, building, and operating costs, the vertical mix in particular – for example from retail, offices, and housing in one building – is especially “unpopular” on the developer’s side; this is also against the background that projects are increasingly being developed as ownership property, but businesses in the ground floor zones are usually interested in letting and not buying. Another obstacle to the development of mixed use is the marketing time pressure because of the adaptation to prevailing demand trends.

Functional mixed use cannot be attributed to a single ideal model. Depending on the location and the local situation, it makes sense in a building, on the block, on certain streets, or in the entire neighbourhood. Existing neighbourhoods from different eras, which are already marked by mixed use, offer good conditions for an appropriate functional development. They usually feature many different types of housing and provide good conditions for small and medium-sized businesses in various sectors. Nonetheless, even these locations are in danger due to operational processes of concentration, for example through the reduction in the number of branches of banks and post offices, or the closure of smaller businesses in favour of larger stores in (food) retailing.

A substantially bigger challenge is the new development of mixed-use neighbourhoods. Because here it is not done with the designation of mixed areas in land use planning. Corresponding area designations are rare in Germany. In early 2014, the Bund Deutscher Architekten (BDA, Association of German Architects) published the evaluation of a private real estate brokerage portal for building plots: From about 6,000 building areas covered nationwide, only about 150 – thus only 2.5% – were identified as planned mixed areas. According to the Federal Land Utilisation Ordinance, mixed use by commercial and residential development is permitted not only in the Mischgebiet (MI, mixed area), but also in Besonderes Wohngebiet (WB, special residential area) and Allgemeines Wohngebiet (WA, general residential area). The extent of permissible mixed use in newly established construction areas is, however, at this point unknown. In planning new mixed neighbourhoods, the usually monofunctionally oriented commercial



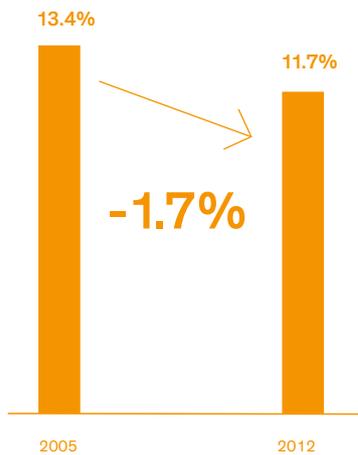
Oderberger Straße 56, Berlin
Urban Mix at the Building Level

Functional mix is not only possible at the neighbourhood level, but also at the building level. The residential and studio building at Oderberger Straße 56 in Berlin creates a differentiated space allowances on a plot of only 315 m² with a floor area ratio of 4.0. With different ceiling heights and arrangements across storeys, 19 independent units emerged, each as a “building within a building”. They offer space for businesses, studios, apartments, and common areas. The exhibition space on the ground floor is the smallest unit, and with each action addresses the relationship between public and private space once more. Realised as modified assembly model, the project not only stands for the mix of different uses, but also for the mix of funding models, such as rental and ownership.

Developer: Baugruppe GbR Oderberger Straße 56
Architecture: BARarchitekten, Antje Buchholz, Jack Burnett-Stuart, Michael von Matuschka, Jürgen Patzak-Poor
Structural Planning: ifb thal + huber, Berlin
Building Services: DELTA-i GmbH, Berlin Michael Morosoff
Planning/Construction Period: Planning 2007–2008 / Completion 2010

Functional mix under difficult framework conditions Living and working

Source: Destatis 2009 und 2013



Real workplaces instead of home offices

Share of labour force who primarily or sometimes work from home

interests and structural changes in the retail sector have an especially aggravating effect. With a view to municipal practice, it becomes clear – among others, in a recent study by Difu – that despite designation as mixed area, to a large extent mostly monofunctional residential areas are in fact developed.

Conflicts

The Difu study has also shown that in the planning of areas disadvantaged by noise (traffic noise, commercial noise), municipalities have to struggle primarily with the high requirements for noise protection. **Municipalities name above all use conflicts in mixed neighbourhoods as a cause for tension, followed by design deficits, and emissions.** Noise pollution in mixed-use neighbourhoods is solvable through the conversion of requirements from external to internal sound, namely, through technical provisions, such as the HafenCity windows developed in Hamburg, sound-absorbing building materials, noise barriers, or noise protection developments. However, such solutions can also be at the expense of design quality of public spaces. Thus since the 1990s, there has been a debate about more flexibility of noise control; the 5th German Baugerichtstag will also deal with this. However, demands for a fundamental reform of the Federal Land Utilisation Ordinance with the aim of facilitating mixed use have not proved to be expedient, according to the Difu study.

A number of examples (including in the context of the foundation's Baukultur workshops in 2014) make it clear that social and functional mixed use can be generated through densification. However, the increase in density without increasing quality often finds little acceptance with the local population. **Thus, almost half of the municipalities name densification as another current conflict issue.** In particular, this concerns the loss of open areas and spaces, change of structural conditions (exposure, view, etc.), fear of displacement, and apprehension about the increase in population density. In contrast, a densification adapted to the location and carefully implemented presents significant opportunities to promote the qualification of residential estates from the era of post-war modernism, the mixture of (age-adjusted) forms of living, and also the social mix. In this case, the information and involvement of the local population plays a central role.

Social Mix, Gentrification, and Segregation

Overall, the concept of social mix today has a positive connotation and has become a central policy goal. Social mix in urban neighbourhoods is seen as an alternative model to the growing divergence of urban societies. Corresponding approaches can be found in legal frameworks, which are important for urban development. Thus, section 1 of the Baugesetzbuch (BauGB, Federal Building Code) and section 6 of the Wohnraumförderungsgesetzes (WoFG, Federal Housing Promotion Act) stipulate “balanced” or “socially stable resident structures”.

However, real estate and rental price increases can contribute to a homogenisation and thus segregation of certain sought-after locations. This tendency is reinforced because of the conversion in many cities of rental apartments into condominiums due to the expected return of investment; this usually goes hand in hand with the medium-term displacement of

existing residents. In current research debates, gentrification is understood as a multistage development: The influx of households with higher incomes into inner-city districts initially contributes to a greater diversification (mix). A hitherto mostly neglected area is first “supported” by the change of the economic and social composition of the neighbourhood population. With this development, however, lower-income population groups that cannot keep up with the demand-driven rising rents are displaced to other neighbourhoods, thus tendencies of social and economic segregation can be strengthened. This process is not without influence on the living environment, whose character and atmosphere gradually changes.

Against the backdrop of growing inequality in income and labour conditions in urban populations, social and ethnic segregation, and as a result, a spatial polarisation of social strata of an urban society, represent an increasing challenge for many German cities. The overlap of different segregation processes can lead to a lasting destabilisation resulting in less attractive locations, neighbourhoods and districts, which must be counter-acted.

Scope and Potential

The neighbourhood is becoming increasingly important as a reference plane for urban development. Hence, municipalities have the task of focusing guiding principles, concepts, and tools more intensely on this plane than previously. The participation and cooperation of different stakeholder groups in the neighbourhood takes on a new significance in terms of acceptance, sustainability, and identity formation.

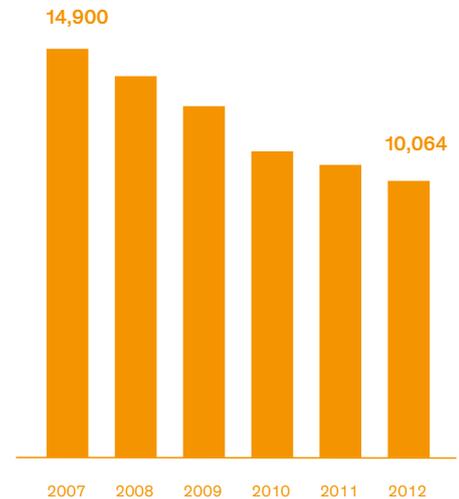
Municipal Real Estate and Property, Municipal Enterprises

Mixture emerges through the coming together of different users, socially as well as functionally. Mixture is thus the result of the interaction of stakeholders in the real estate market as well as in the rental housing market. The public sector, as owners of land and buildings, are themselves market participants. Already in this way, a contribution to the emergence of a balanced use of structural conditions can be accomplished. At the same time, it is the duty of the municipality to ensure a consumer-oriented provision of public services and infrastructure; the relation to neighbourhood is also crucial here to promote decentralisation instead of concentration.

Property also opens up the opportunity for municipalities to play a part in the real estate market as a seller or lessor of land, which is in some regions of Germany already a traditional municipal zoning policy approach. Through the allocation of land to specific target groups or the awarding of leaseholds, important impetuses for a social – but also functional – mix of uses can be set. Municipal property should therefore not be solely considered fiscally. Rather, it opens the chance to set Baukultur – and thus social and sustainable – effective accents. This includes awarding a specific portion of land to building groups or other residential projects, e.g., for multigenerational living. Precisely such projects can impact positively on the environment. As the examples of a number of cities show, suitable

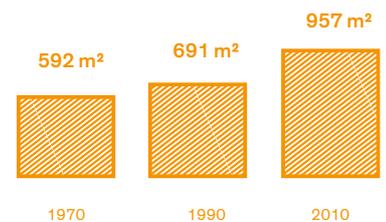
Functional mix under difficult framework conditions Retail trade

Source: Destatis 2009 und 2013



The demise of small neighbourhood grocery stores

Development of the number of small grocery stores in Germany (under 400 m²) 2006 to 2012



The space requirements for supermarkets is growing

Average supermarket sales areas in Germany 1970 to 2012



Living on Innsbrucker Ring, Munich
 From Noisy Row Construction to Housing with
 Communal Interior Courtyards

The residents of the linear block development from the 1960s – which opens towards Innsbrucker Ring – suffered from street noise, the sealed open spaces of the complex, and the buildings' poor energy status. With these problems, the district was representative of many residential estates of post-war modernism in Germany.

Through modernisation measures and targeted densification, the problem of noise pollution could be solved, and at the same time an upgrading of the area could be achieved. The open rows were closed with three five-storey new building with 14 apartments. This "gap closure" functions as a noise barrier and has a calming effect within the residential complex. The resulting shared inner courtyards serve as recreation and relaxation areas. The stationary traffic was transferred to a new underground car park. Penetrability for pedestrians supports networking with the neighbourhood. The three rows of the existing building stock were increased with 25 new apartments. Different open-use floor plans as well as large balconies and floor-to-ceiling windows also contribute to increased residential quality. The façade image of the new buildings along the ring does not correspond to the often purely functional sound insulation façades or "backside architecture" found elsewhere, but presents a pleasant appearance, whereby the quality of urban space is also enhanced.

Developer: GWG Städtische Wohnungsgesellschaft München GmbH
Architecture: Felix+Jonas Architekten GmbH, Munich
Structural Planning: Suess Staller Schmitt Ingenieure GmbH, Gräfelfing
Landscape Architecture: Stefanie Jühling Landschaftsarchitektin BDLA DWB, Munich
Planning/Construction Period: Planning from 2007 / Completion 2012



projects can also be given targeted support by municipal counselling services. Only EU regulations that are also effective at the municipal level have increasingly impeded these influences in some cases.

A supplementary option for widening the scope of the municipality is the (interim) acquisition of key properties and major development areas. Here, the municipalities or affiliated companies may actively influence the development and its impact on the neighbourhood. Municipal land policy can make the quality of development concepts, rather than the highest price, the selection and award criteria. Baukultur can thus be directly promoted through design tasks, competitions, or special types of functional mixture. Here, the municipal housing companies and cooperatives, as major players in the housing market, play a key role in ensuring a social mix in the neighbourhoods and in the provision of affordable housing.

Construction Planning Law

Regardless of their own property, as municipal planning authority cities bear a major responsibility for a well-ordered, public service-oriented, and overall sustainable urban development – in the existing building stock as well as in new construction areas. The entire nationwide range of formal tools arising from the Federal Building Code and the Land Utilisation Ordinance can be used depending on the task and objective.

Already in the 1970s, federal legislators had significantly improved the instruments for the preservation and creation of mixed population structures. Dating from this period, “special residential areas” could be established to maintain and develop mixed-use neighbourhoods with their characteristic features. Thus, for example, in a vertical arrangement of the building, the ground floor zone can be kept for of trade and services and the upper floors for habitation. When developing new or – in certain cases – in the densification of existing neighbourhoods, design options present themselves on the basis of urban development contracts. Use constellations can be further differentiated, or design and other Baukultur aspects can be made the aim. In response to social displacement, the enactment of a milieu protection statute – depending on the legal situation in the states – or the application of misappropriation regulation may be useful. Similarly, the range of legal instruments for the maintenance of the existing population mix can be utilised.

Informal Measures and Tools

The municipality can also support the goal of mixed neighbourhoods through a variety of informal measures. Among the major components – in addition to the use of informal planning instruments and detailed environment analyses – are monitoring and coordination of the consultation process, the active marketing of the “product” mixed use with an efficient project management, the integration of all relevant stakeholders, and in-depth information for developers and users. The exploration of potential demand as well as direct contact with target groups and users are important for concept development. Baukultur can be strengthened by advising developers and investors, the implementation of competitions or multiple-commission processes – also in non-public building projects in residential, office, commercial, and retail trade building – the involvement of local

politicians, and not least ensuring a high and exemplary architectural quality in the municipality's own building projects.

Similarly, urban development promotion can be used in a target-oriented manner, not least due to the anticipated close cooperation between the public sector and private owners as part of the different federal state programmes. In any case, however, a fundamental clarification and understanding about the objectives of urban development in the municipality are of key importance, both for the functional as well as the social mix. Vital for their implementation is the integration and sustained support by local politics. Across Germany, suitable instruments to bring about such a goal clarification have proved to be integrated urban development concepts on the city level and integrated urban district or neighbourhood concepts on the sub-regional level.

Conclusion and Outlook

Over the next five years, probably a million new homes will be built in Germany's growing cities. By 2025, there could be more than three million. The political debate about affordable rents leads directly to the quantitative track record: the lower the price per square metre, the greater the political pride. Thereby, it is already foreseeable that it does matter what architectural quality the newly built homes have, what they look like, and whether they are still economically sustainable in 20 years – i.e., marketable. The many challenges of the neighbourhood can lead to breaking these mechanical points of view in favour of integrated Baukultur quality standards.

Functionally and socially mixed neighbourhoods are characterised by a resource-efficient settlement patterns, and their strengthening contributes the reduction of urban sprawl and land use. They are a central anchor for issues pertaining to demographic and social development of urban society and usually face development fluctuations and trends much more robustly compared with mono-functional estates or building areas. Against the background of changing living, working, and housing models, urban mixed-use neighbourhoods are attractive. Residents find their desires for a coexistence of work, housing, care, leisure activities, public open areas, and green spaces – with a high degree of urbanity at the same time – largely fulfilled. They actively look for such locations and associate with this an expectation of increased quality of life and housing satisfaction that contributes to locational ties and identity formation. This opens up new opportunities for Baukultur, because if inner-city neighbourhoods are experiencing a new demand, it is all the more urgent to strengthen the existing building stock, develop or adapt it socially and for mixed use, and thus successively qualify already built living spaces.

Due to increasing demand, inner-city living is a key issue. The neighbourhood is the foundation for needs assessment and planning and the consideration of the architectural building stock and its further development. It is valid on the one hand to maintain and strengthen the variety of a diversified range of housing types, and on the other hand to ensure the

supply of affordable and financeable housing space for different population groups. Thereby, the need for a comprehensive energy refurbishment of the existing building stock puts the municipalities under as much pressure, as the significant demand for new housing in prospering cities. For quality assurance in terms of Baukultur, however, the necessary time frame for a careful design and development is crucial.

The quality of functionally and socially mixed neighbourhoods is largely determined by the interaction of existing buildings and complementary new buildings. Enabling compartmentalisation with different property owners and different uses – both at the neighbourhood level as well as in the object itself – is a good precondition for working towards a functional and social mix. A key to implementing these qualities is the developers and their willingness for sustainable concepts (in the best case, in the form of owner-occupied or retained existing buildings). Municipalities can directly and indirectly influence the Baukultur quality of investments through intensive counselling, but also through concept-bound property allocations, competitions, and design advisory councils. Similarly, the existing neighbourhood residents and future users of the new offers have a key function. Involving them from the outset in the planning and making them aware of the concepts of densification and adaptation strategies is a good way to make to maintain high-quality living spaces in the city centres or to create new ones.

Lively, mixed neighbourhoods make high demands on the accessibility and the common use of ground floor zones, and thus they logically lead to the issue of designing an attractive living environment and public space.

Public Space and Infrastructure

Public space is accessible and usable by everyone, and its care and maintenance is usually the responsibility of the public administration. It is highly important not only for the appearance, but also for the functioning and prosperity of cities. Public space, its infrastructure, and other facility elements – as well as the buildings containing it – creatively form a whole whose individual elements are, at best, coordinated. From a functional perspective, streetscapes, plazas, parks, and other green or open spaces serve both privately used buildings and public buildings equally: Public spaces should facilitate smooth traffic, offer amenity value for recreation and leisure, satisfy all age groups with specific offers, be diverse, well kept, vitalised, and representative, while still conducting a healthy microclimate and adopting the requirements for the city's climate adaptation. Particularly in focus at the moment are the technical and transportation infrastructures that require renewal due to the backlog of investment, as well as structural changes that are essential in view of climate change. Public space is usually municipal property, which operationally facilitates its qualification as orientated to the common good.

Good Arguments for Baukultur – What Public Space Can Achieve

Most public spaces feature functional specialisations. Green areas have a different meaning for the urban context than city streets or squares, in turn, city centre locations require different concepts than the outskirts. They vary according to the specific tasks and their urban spatial embedding. Consequently, it is not possible to define quality criteria for “the” public space. Nevertheless, some general criteria can be designated that are adequate for adapting the corresponding public spaces.

Accessibility

Public areas are dedicated to the general public. An important quality criterion is their free accessibility. It is a basic prerequisite for the democratic values of equality and tolerance. This is especially also true in places where traditional public uses in public space were privatised, such as shopping centres, for example. Public usability also requires good availability of public spaces. **Almost every second municipality surveyed considers the integrated location an important prerequisite for Baukultur. Almost every one of the Forsa respondents, to be precise 96%, want good availability of facilities, and for 84% accessibility to parks or nature in their own living environment is (very) important.**

Urbanity

The convergence of different environments and the coexistence and cooperation of various age groups and ethnicities are prerequisites for vitality, and thus for an atmosphere perceived as urban. For this purpose, the coexistence of different public spaces also makes a contribution – like the simultaneity of different activities in public space. Open spaces should allow recreation and sports activities, communication, and voluntary gatherings, as well as creativity, development, and unpredictable, emerging usages. Public spaces should enable all of this.

Functionally Adequate Usability

Public areas are spatially and functionally related to the neighbourhoods and urban spaces in their environment. It is important to recognise the functions and requirements deriving from expectations, needs, and urban spatial implications and to consider them in design, maintenance, and regulation. The coexistence of different user groups in the urban context poses special challenges. They should not interfere with or exclude each other. This is achieved both by adequately sized green spaces that address individual target and age groups with specific furnishings, as well as urban squares and green spaces that are open for use or have multifunctional designs. **Functionality, as a result of building and planning activities, is an important factor of Baukultur for about 67% of the surveyed municipalities.**

Barrier-free Access

Freely accessible use of the architecturally designed environment has to be equally possible for everyone – and thus also for people with disabilities, the elderly, and families with small children. Therefore, the principle of barrier-free access in public spaces is a central feature of Baukultur. However, full accessibility becomes difficult, especially in historic city centres, where cobblestones as surface material often lead to conflicts with bicycle and pedestrian traffic. **According to local survey, barrier-free access is viewed as a conflict issue in monument-protected city centre locations.**

Design

Surface materials, lighting, structural elements, and plants give public space in the city its appearance. A good urban design considers traffic issues, as well as aesthetic, social, and communicative aspects. If the individual aspects correspond to the requirements of the respective spatial types and urban spatial situation, then the design promotes the attractiveness and distinctiveness of urban spaces. Underlying uniform design principles here also shape local identity, which in the regional and national contexts can also become relevant as a landmark, magnet for tourism, as well as economically. In the structural design, less is often more, in order to work towards both a coordinated cityscape and flexibility of use. **For about 95% of the surveyed municipalities, design is one of the most important criteria of Baukultur, and 93% consider local identity to be an important feature.**

Park at Gleisdreieck, Berlin

Balance between Nature Conservation and Recreation

The 26-acre park at Gleisdreieck was built on an old railway property in an inner-city location. On the wasteland, a nearly natural, largely untouched open space had developed – straddled by viaducts and crossed by tracks. Both characteristics – nature and infrastructure – are an integral part of the park's redesign. The population's participation was taken into account early in the planning process. Results of surveys in 1,600 households in the surrounding area, online dialogues, and on-site events were included in the remit of the open space planning competition. Elected citizens' representatives formed a project-related working group, which discussed planning issues during the transformation. Thus, good information sharing with the population could be ensured, and as a result the transparency of the process could be increased.

Today, the park provides a clear framework of footpaths and a wide range of sports, game, and recreational areas. Particularly valuable areas, on which sensitive flora and fauna have developed, were fenced. The equal consideration of conservation issues and the use-intensive recreational and relaxation areas for all ages and social groups characterise the park's special atmosphere.

Developer: Senate Department for Urban Development and the Environment, Berlin, represented by the Grün Berlin Stiftung
Project Control, Project Management: Grün Berlin GmbH
Overall Planning and Design: Atelier Loidl Landschaftsarchitekten
Construction Management: Breimann Bruun Simons Landscape Engineering GmbH, in cooperation with Atelier Loidl
Planning/Construction Period: Competition 2006 (1st Prize) / East Park opening 2011 / West Park opening 2013 / Bottleneck Park Opening March 2014



Cleanliness and Safety

A respectful approach to the built environment, in the sense of Baukultur, expresses itself in its care, which at the same time also contributes to a sense of security. In general, unkempt green areas or overflowing bins in public space are considered to be as annoying as vandalism to buildings and equipment. **Almost the entire population, namely 92%, consider well-maintained and cared for buildings, streets, and squares (very) important. For the municipalities, in turn, vandalism is one of the five most common conflict issues in public space.** On the other hand, a certain degree of tolerance with respect to the active use of open space is also an expression of urbanity. The need for security must not lead to calls for the full control and supervision of public space.

Balance

It is clear that the city centres – due to their importance for trade, tourism, and urban identity – take on special functions and thus require an increased level of planning attention. However, not least in view of the life quality and satisfaction of the population, it is essential that not only the public space in the city centres, but also on the outskirts and in the districts experience Baukultur consideration. Well-maintained public spaces and a suitable design have a high priority in the districts and are a prerequisite for attractive residential locations. **More than half of citizens (58%) want an attractive and interesting design of the living environment.**

Status Quo and Current Developments

In their entirety, public spaces have to take account of urban diversity and the numerous social requirements. The care and development of green spaces is thereby just as necessary for the high-quality, identity-establishing appearance of public space as the conservation of historic urban spaces and buildings façades that are valuable to Baukultur, the formation of new, modern district squares, and the user-friendly configuration and organisation of traffic areas.

Urban Green

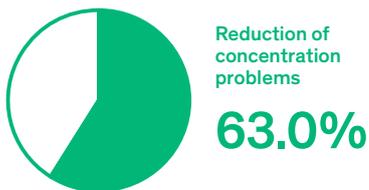
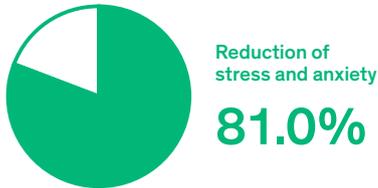
Public green areas located close to residential areas contribute significantly to the attractiveness and viability of inner-city neighbourhoods. According to the Global Green Space Report 2013, 69% of Germans believe that nature makes them happy. In addition, 81% consider that green areas are (very) effective against stress or anxiety, and 67% think this in relation to concentration problems. At the same time, urban green also assumes ecological functions in the city, for example, by leading to noticeable cooling effects in street spaces and on buildings and façades, and reducing the overheating of dense urban areas. Thus, urban green promotes the well-being and health of city dwellers.

The amount of designated recreation areas on the total area of Germany has risen steadily in recent years: from 0.7% in 2000 to 1.2% in 2012. On average, an additional 25 hectares are used each day for recreation areas.

Greenery makes people happy

Share of respondents who associate an effective or very effective impact with nature and greenery

Source: Husqvarna Group 2013



In terms of the existing housing and transport areas, this makes their share currently 8.6%. That the increase of green and open spaces leads to a higher quality of life in cities is also reflected in the satisfaction of the population. **After all, 92% of the population are (very) satisfied with the proximity of large parks and nature in their living environment.** However, with a view to Germany-wide excessive land use in general, it is becoming increasingly important to create new recreational areas within the existing settlement context. The model of dual endogenous development, in which land reserves in the existing residential stock are developed not only structurally but also with a view to urban green, is hence gaining more and more importance.

Urban green is also an integral component of many urban development concepts. An essential principle here, among others, is the networking of green spaces. Compartmentalised green spaces and parks close to residences are systematically linked within the housing stock, as well as with superior landscape areas on the outskirts of the city. This creates both an added value for nature conservation and biodiversity, as well as a use-intensive recreational function, in which new, attractive path connections for pedestrians and cyclists are developed.

In terms of Baukultur, public urban green is thus also of great importance, because it provides an exciting interplay between development and landscape. At the same time, it contributes to the design, spatial shaping, and appreciation of specific locations, and hence generates a lot of synergies: green spaces enhance the living environment and impact location and investment decisions as a soft factor. This also benefits the land and the real estate market. According to a study by the Technical University of Dortmund, individual open space parameters increase the standard land value by 5 to 10% – and under certain conditions, by up to 20% and more – depending on the function, equipment features, and overall spatial context.

Bodies of water represent an important component of urban and climatically effective recreational areas. Cities increasingly recognise urban rivers, lakes, and water systems as potential and innovatively integrate them in the cityscape. Whether the renaturation of channelised and piped watercourses, or the development of riparian zones as recreational areas, or the plaza designed with water, municipal authorities use the element of water for comprehensive urban strategies. New districts such as HafenCity Hamburg choose the relation to water for the creation of prestigious addresses, and in Saarbrücken, the project “Stadtmitte am Fluss” (City Centre on the River) is the flagship project of the current urban development.

Green in public space also has a historical architectural significance: Urban historical epochs can be read in parks, ramparts, and other garden monuments and hence give the city local identity. Accordingly, both the care and design of green areas form an important foundation for high-quality public spaces. This assessment is shared by a large majority of the municipalities.

However, the downside to the expansion and qualification of the proportion of green area in cities is the accompanying care and maintenance costs. Given the structural underfunding of many municipalities, the appearance and also the functionality, and not least, the security in public green spaces and parks have to some extent already been visibly damaged.

Urban Squares

Town squares have always been places where public urban life takes place. Thus, they take on an important social component for urban society. With a view to the city structure, however, these squares also have a significant – not merely creative – function, especially in dense construction. In central areas, urban spaces are usually of historical origin and composed in accordance with the surrounding historic façades. Thereby, they become public spaces that characterise the cityscape and convey identity. Their appearance, as well as that of newly planned urban squares, is indispensable for a city's identity.

The use of the ground floor zones of adjacent buildings also significantly affects the atmosphere of town squares. In particular, inner-city areas hold vast potential with regard to vitality and diversity of use, simply due to their compartmentalised parcelling. On the other hand, square edges that are formed by large structures with only one use, as well as shop vacancies, severely impair the atmosphere of public space. **More than half, or more precisely 65%, of municipalities consider the revival of ground floor zones (very) important for the qualification of public spaces.**

Accordingly, much is invested in the security, care, design, and features of squares – especially in the historic city centres and inner-city areas. In terms of design, the essential elements in public space include lighting, arrangement of trees, the use of different materials, as well as furnishing of benches, fountains, and signs. In some cases, the reference of the furnishings to the concrete urban context is not given. At least in selected urban areas, such as historic locations or in the city centre, furniture design concepts are generally developed. But apart from the central town squares, there are also a number of district squares in the municipalities, which are currently in urgent need of upgrading and revitalisation. With a configuration that is based on the social composition of the residents in the neighbourhood, they can significantly enhance the attractiveness of the living environment. However, if district squares are carelessly designed, unkempt, or vandalised, they can quickly lead to a devaluation of the entire district and permanently affect the quality of life in the respective location, similar to vacant or dilapidated buildings. From the perspective of the municipalities, district squares – including their design and maintenance – have a correspondingly very high value. **Only about a third of the municipalities assess the design quality of their street furniture as (very) good. The municipalities consider the design and maintenance deficit – next to the dominance of private transport – the largest conflict in public space, followed by use conflicts and vandalism. In this context, three-fourths – almost 78% – of the municipalities find the upgrading of district squares (very) important.**

Staged Inner Cities

City centres are places of trade as well as key cultural and consumption establishments. They should be interesting both for residents as well as customer groups from the surrounding area, visitors, and tourists. Inner cities are staged for these purposes. This harbours opportunities, for example, because the preservation and care of Baukultur heritage is promoted for the purpose of representation and staging. Likewise, design

care is part of a marketing strategy for the inner city. **According to the survey, many municipalities implement this strategy with the help of design statutes or regulations governing the advertising structure, which applies to all property owners and the corresponding buildings.**

However, the use of advertising structures in particular requires city a clear procedure in the entire to protect public space from overload or defacing. Advertising is usually concentrated on billboards, vitrines, and advertising columns in street space or in traffic structures such as subway stations. They are meanwhile part of the appearance of the cities and are widely accepted, despite uniformity and interchangeability. **According to a survey, only a small proportion of the population, namely 6%, feel disturbed in their own residential area by billboards or illuminated advertising.** For several years, however, advertising with giant posters on scaffolding, also known as blow-up ads, has led to frequent conflicts. They are usually located at busy traffic hubs in inner-city locations or on main roads, can be several hundred square metres large, and are a lucrative source of income for investors during the course of building projects. Although the scaffolding sites are only temporary, the impact of large-format advertising is extremely striking and can lead to an unwanted design and content dominance throughout the urban environment. Various court rulings have already been passed on large advertising, and cities like Munich have agreed on specific regulations for large advertising systems, to protect at least listed or sensitive areas of the city from them.

There is, however, another facet of commercialisation: Particularly in the shopping streets, an increasing uniformity of the offerings – and thus interchangeability and arbitrariness of public spaces – has been determined. This is partly the result of subsidiarisation. Global companies and retail chains not only use fixed guidelines in terms of offered goods, but also in terms of façade elements so that recognisability is assured. This trend is regarded as problematic in terms of Baukultur, but will continue to increase due to economic reasons: According to the Deutschen Franchise Verband e. V. (DFV, German Franchise Association), the establishment of franchises in 2012 compared to previous years – particularly in the service sector, but also in retail and the food service industry – increased significantly. From the perspective of the municipalities, comparatively little potential for conflict is hidden here. **With around 25%, only every fourth municipality sees a conflict in the commercialisation of public space.**

In some cases, this is accompanied by privatisation. Due to special use permits, restaurants shape the public domain through their outdoor eateries, shopping centres, and arcades – owned by operating companies – which offer the public multifunctional experience spaces, thereby replacing traditional shopping streets and pedestrian zones. Private influence on the use and design of public space is thus ubiquitous, but it does not rule out public use if close cooperation between the owner and the public sector takes place. Also, the other way around, the use of private land by the public is possible – for example, in the replanning of the Arneke Galerie shopping centre in Hildesheim – if public rights of way on private areas are ensured through urban development contracts.

Public space is also increasingly used for temporary commercial events. Already in 2000, the Bund Deutscher Architekten Köln (Association of

German Architects Cologne) outlined in a “Monday Discussion” that in the city’s public space, three times more public events, concerts, and festivals took place as in 1985. In the meantime, festivalisation has become an integral part of the municipal event planning. Public events always lead to temporary loss of function, as well as an enormous burden for residents. This inevitably causes use conflicts, whether noisy usages exclude other uses or make them impossible or whether the attractiveness decreases temporarily due to littering. Nevertheless, hardly a municipality sees a permanent conflict for public space from temporary festivities. **Only about 16% judge events in public spaces as problematic.**

Traffic Areas

Public space is to a large degree street space. In a route comparison, municipal roads account for the largest share of traffic routes. Many of the inner-city transport axes and connections were laid out or expanded in the post-war period, especially in the 1960s. The former model of the “automotive city”, however, was based on much lower traffic volumes. Thus, for example, the car density in Munich between 1959 and 2010 increased from 11.4 vehicles to 432 vehicles per 1,000 inhabitants. The corresponding dominant, space-intensive motorisation level, and also traffic noise and air pollution, have a negative impact on the adjacent residential buildings and limit the amenity value for pedestrians. **Traffic noise is named by the population as the first and foremost conflict in the living environment, followed by exhaust emissions.**

Already at the beginning of cautious urban renewal in the 1970s and 1980s, reclaiming street space in urban neighbourhoods for other functions had begun. Extensive traffic calming, parking space management, and play streets have led to a significant improvement in the quality of public street space. However, the continued high share of journeys covered in private autos remains a general burden and also holds future conflict potential for the public space. **At least in the population, there is the desire to keep their own living environments free of these conflicts. One in two (51%) would like their residential area to be low traffic or even carfree.**

Currently, mains roads are especially under discussion. Due to their dimensions, but also because of the high traffic volume, they often prove to be barriers in public space. To create new amenity value in strongly impaired locations, many cities are reacting with the dismantling of multi-lane roadways in favour of more generous pedestrian areas or with space expansions on street corners based on the New York model. For heavy traffic roads, a clear concentration or deflection of the vehicles to overarching transport links can lead to a new amenity value. Examples in Hannover, such as comprehensive traffic calming and deflection in favour of pedestrians and cyclists at the Klagesmarkt / Goseriende area, illustrate the extent to which the reorganisation of automobile traffic can lead to new inner-city qualities and building areas. **Sixty per cent of municipal authorities see conflict for public space in the dominance of individual transport. For every third municipality, the dismantling of traffic areas represents an important improvement strategy in public space.**

Conceptual measures for shared space projects, of which almost 20 projects are currently planned or implemented in Germany, are also finding

Figures on German transport infrastructure

Length of various transport infrastructures

Source: Markt1-Verlag 2013

Motortways

12,800 km

Federal roads

39,700 km

State and county roads

180,000 km

Local roads

450,000 km

Federal railways

33,000 km

Inland waterways

10,000 km

Public transport network (rail)

5,100 km



Repair of an Automotive City, Pforzheim City Centre Upgrade through Integrated Transport Planning

In many urban bodies, the built heritage left behind by the era of the automotive city includes the many streets whose construction breached existing structures. In the city of Pforzheim, this is especially the case with the Schlossberg slip road built in the 1960s. At the topographically, historically, and culturally sensitive site of the city centre, the slip road results in huge design deficits. In a workshop process in 2012, the dismantling of the slip road and the return to the previous historical course of the road was planned as the objective of the city centre development. This also included the transfer of traffic to surrounding main traffic axes. The overall approach to urban development and economic upgrade of the city centre was decided in a framework plan, in which the various individual measures were pooled. A broad-based planning and participation process accompanied the procedure. The urban development repair of the automotive city, with the help of integrated transport planning, points the way toward a conversion to urban city centres – not only in Pforzheim.

Developer: City of Pforzheim
Transport Planning: Professor Hartmut Topp (topp.plan: Stadt.Verkehr.Moderation), Kaiserlautern, and Planungsbüro R+T, Darmstadt
City Planning: RKW Düsseldorf and KK Architekten Berlin
Planning/Construction Period: Workshop process 2012 / Municipal council resolution 2014 / Completion not before 2016

more and more interest in the course of municipal improvement strategies. Above all, shopping streets, sections of main shopping streets, and square areas are suitable for the shared space principle, in which preferably all means of transport lead to a common transport area. Stationary traffic and signs are largely avoided. Given the environmental and urban spatial effects of automobile traffic, transport planning increasingly relies on so-called multimodal mobility concepts. According to Technical University of Dresden, almost the same number of people moves within a week multimodally, compared with the proportion of those who rely on only one means of transport, which is primarily the automobile. Thereby, the primary focus is on inner-city transportation hubs, but also interfaces between the surrounding areas and the city or peripheral locations and inner-city neighbourhoods.

In this context, the spread of sharing services is an increasingly important component in new mobility concepts – and not only at the municipal level. Thus, the combination of the BahnCard (rail card) with public transport, as well as discounts for railway-owned rental cars and bicycles are currently being specially tested in Berlin. Regardless of this Berlin-specific offer, according to the Bundesverband CarSharing (bcs, Federal Carsharing Association), currently an average of 42 registered users share a rental car. It is expected that the numbers will continue to grow, and at least the second-car problem can be relatively defused through targeted car-sharing deals. Bicycle rental systems are also increasingly noticeable and can contribute to the substitution of automobile traffic.

As part of the “shared services”, a gradual increase in the proportion of electrically powered automobiles is being tested. While this does not have a measurable effect on the choice of transport, it can at least reduce the burden of traffic-related emissions. Also, public space will change greatly in the future through new street fittings for electric vehicles and alternatively powered modes of transport. According to the draft of “Richtlinie über den Aufbau der Infrastruktur für alternative Kraftstoffe” (Directive on Building the Infrastructure for Alternative Fuels) by the European Commission, a comprehensive infrastructure development in this area is necessary. By 2020, a dense network of service stations should be available for vehicles powered by natural gas. Also by 2020, 150,000 publicly accessible charging stations should be available to promote and establish electric mobility – compared to 2,000 charging stations in 2011. Conceivably, a portion of the charging stations will be supplied through innovative systems and circuits for energy production. Already today, it is possible for owners to feed excess energy, for example from energy-plus houses, into their own electric vehicles. In the city, entirely new traffic junctions are being developed through the charging stations, which can also generate a new amenity value and thus contribute to the quality of public space.

Technical Infrastructure

The modernisation and renovation of technical infrastructure are a major socio-political challenge for the coming years and decades. In addition to the area of supply and disposal, together with all its power and pumping stations – where not only technical innovations, but also in some cases increased decentralisation concepts come into play – the transport

infrastructure, particularly in the form of roads and bridges, plays a central role. The associated investments occur for the most part in public space, and affect its functional as well as its design quality. The opportunities, but also the Baukultur risks that can be associated with them, are shown by traffic construction in central urban locations, such as elevated highways from past decades. **Elevated highways are judged by more than half of municipalities as (very) bad in terms of design.** An extreme example of the Baukultur dimension of traffic structures is also provided by the Elbe crossing in Dresden, which in 2009 led to the loss of the World Heritage title due to design-related tensions with the landscape zone. The Deutsche Brückenbaupreis (German Bridge Design Award) of the Federal Chamber of Engineers and the Association of Consulting Engineers (VBI) is setting a good example, each year honouring especially successful examples. The bridge advisory board of Deutsche Bahn AG, as well as the manual “Designing Railway Bridges”, also provided important stimulus in the past.

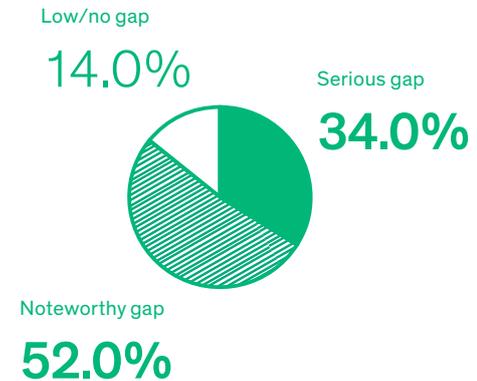
In any type of infrastructure renovation or transformation in public space, accessibility plays an increasingly important role. In this area, there is increased backlog of investments. In a recent study, Difu found that with regard to accessibility, the largest conversion needs in German municipalities – after the redesign of residential buildings – are public transport, as well as streets or in living environments. Taken together, the renovation of public space and the technical infrastructure, at 28.3 billion euros, actually constitute the public sector’s largest investment needs. The municipalities are very aware of the urgency of this task. **Over 80% of the municipalities consider accessibility a (very) important measure to qualify public space.** However, the implementation of accessibility should be understood by the cities not only as a functional requirement, but also as an opportunity for more comprehensive design and improvement measures. The city of Frankfurt a. M., for example, has made available – with the support of the expansion programme “Schöneres Frankfurt” (Nicer Frankfurt) – funding for 100 projects in public space, and thereby made accessibility one of the eligibility criteria, along with many other design principles, for attractive and sustainable public spaces. Numerous technical infrastructure systems are not apparent, but run underground. Also here, increasing investment and modernisation needs are known, which impact public space or can be realised through measures in public space. For example, drainage systems often no longer meet the growing demands of increasing cases of heavy rain. Here the solution usually does not lie in the larger dimensioning of the combined sewer system, but in decentralised collection and seepage. In newly planned residential areas, seepage areas for rainwater have formed an important component of design concepts for some time. In existing inner-city locations, new innovative solutions are needed in view of expected extreme weather events.

With regard to climate change, considerable efforts for improved flood protection are required in the municipalities. In Bavaria alone, an annual average of 115 million euros will be needed by 2020 for flood protection in the Danube and in the Main areas, according to the construction industry. In terms of a total loss of about 12.5 billion euros caused by floods in Germany between 2002 and 2010, investment in preventive protection is money well spent. Architecturally, these investments offer valuable synergy effects,

Investments in roads urgently required

Municipal assessment of the investment gap for roads and transport infrastructure

Source: KfW 2013



Challenges of demographic change

Estimate of the total investment required for the age-appropriate refurbishment of infrastructures and residential buildings

Source: Difu 2012a

Residential buildings

21.1 BN €

Public transport

15.0 BN €

Roads and living environment

13.3 BN €

Sports facilities incl. pools

1.7 BN €

Care facilities

0.8 BN €

Health

0.7 BN €

Administration buildings

0.6 BN €

Cultural institutions

0.1 BN €

when combined with measures for an attractive riparian zone design, and thus an improvement of public space.

Climate change will also require major investment in energy infrastructure. By 2020, wind turbines should generate almost twice as much electricity as today. According to the federal government, to make the electricity available, Germany requires 4,500 kilometres of new transmission networks with 220 or 380 kilovolt ultra-high voltage, also by 2020, in addition to the currently approximately 35,000 kilometres of ultra-high-voltage lines. In congested urban areas, there is little space available for this, so the electricity, gas, and district heating pipes are usually laid underground. Apart from the increase in technical provisions for the production of solar energy, the energy transition will be located mainly in peripheral locations and rural areas and radically change the appearance primarily of the German landscape.

Scope and Potential

High-quality urban spaces emerge only through targeted commitment – both from the municipalities, as well as private stakeholders and the population. Indeed, the cities are in the first instance responsible for public space, but there is also sufficient interest and potential in the wide variety of stakeholder groups to play a part in its design.

Refurbishment of the Technical Infrastructure

The refurbishment and renewal of technical infrastructure is a top priority in most municipalities. Thereby, large sums of money are invested in public space. This opens up opportunities to contribute to the quality of public space and to use measures for an “increase in Baukultur”. In the past, the impact on the urban environment was often not sufficiently considered.

Only about 22% of the municipalities consider the design quality of their technical infrastructure good, only 1% considers it very good. In terms of Baukultur, however, one in three municipalities consider the facilities poor to very poor.

Since traffic infrastructures in particular must also be renewed or renovated, an inter-agency collaboration between the transport, urban development, and open space planning disciplines is especially expedient. If the renovation of entire street spaces is planned, close cooperation between the administration and the affected residents, business people, and other owners should also take place. At a conference of the Ministry of Infrastructure and Rural Development of the State of Brandenburg in 2013, different municipalities showed how public urban space, Baukultur, and transport are currently conceived together in municipal practice. Defusing the problem of particulate matter and the reduction and shifting of traffic volume were thereby considered, as well as the barrier-free transformation of street space, material properties, funded refurbishment of building façades by the private sector, and rainwater drainage. Similarly, collaboration on flood protection issues or as part of the renewal of



Flood Protection and Design of Main Riverbank, Würzburg

Combination of Technical Solutions and Design Requirements

Since the 1970s, the City of Würzburg has worked on comprehensive flood protection for the city centre. The challenge in remodelling a remaining gap along the Upper Main quay was to offer protection from the forces of nature, while at the same time considering the urban spatial advantages of a waterfront location. Through a slight change in the traffic management system, a plaza installation with structural and mobile flood protection emerged in the central area of the 1,000-metre section of the riverbank. The technical elements are now part of the public space – but not foreign elements. With its exposed position, design, and gastronomic options, the new urban space offers a high amenity value. Some sections of the flood protection pass linearly in front of the existing buildings. Thereby, the typical regional design of the protection barriers locates the installation in the cityscape. The newly created spaces between the buildings and the wall can be used by residents, who were involved in the planning from the beginning. Combining technical requirements with design and urban spatial qualities – not only in flood protection – is a task for many planning departments in German cities.



Developer: Free State of Bavaria, represented by Wasserwirtschaftsamt Würzburg in cooperation with the City of Würzburg
Architecture and Outdoor Installations: Klinkott Architekten, Karlsruhe
Supporting Structure and Civil Engineering: Dreier Ingenieure, Würzburg
Transport and Outdoor Installations: Ingenieurbüro Maier, Würzburg
Planning/Construction Period: Urban Development Competition 1998–99 / Planning 2000–2006 / Completion BP1 und BP2 2009, BP3 2012

underground utilities is advised, to exploit design and quality-promoting potential.

Use Management and Conversion

Public spaces are often under strong use pressure, along with numerous conflicts between different user groups and types of traffic. In this context, it can be seen as a step towards better quality of life when municipalities organise public spaces for limited periods of time. Since 2010, for example, the “Qualitätsoffensive Freiraum” (Free Space Quality Campaign) in Hamburg has organised annual “White Dinners” on temporarily closed roads, so that traffic areas are reclaimed by residents at least from time to time. Bike rallies, city skating, and other sporting events in public spaces are other examples of a temporary appropriation of land by certain user groups.

Military conversion areas, industrial wastelands, and unused railway areas also offer great potential to defuse use conflicts, by creating new public spaces or discovering and qualifying existing spaces with public participation. Recognising this potential and making it usable is primarily the responsibility of the municipality. Before finalising a final utilisation concept, these “areas of upheaval” can also be considered as possibility or experimental spaces for the population, in order to open up the scope for innovation and urbanity. Particularly in the urban context, appropriation processes of unused areas by the population – as in urban gardening – are experience increasing interest. Such projects for participation in public space have a social value beyond the concrete measure, increasing the identification with the location and with it the feeling of belonging and participation, as well as a sense of responsibility.

Cooperation and Financial Incentive

There are many ways for municipalities to work together with other stakeholders on the goal of an attractive public space. For retail and tourism, cultural facilities, tourist accommodation, and the food service industry, an attractive environment plays an important role. Especially merchant communities usually have a strong interest in improving the urban environment, not least to benefit from the synergy effects for their companies. In principle, however, and in the scope of their financial resources, other actors – such as churches and clubs – also show a willingness to design public space, to co-finance or to co-maintain it. Fund-raising, donations, and sponsorship can – similar to business improvement districts – also make important contributions, without public access or municipal property having to be abandoned. Also, special utilisation rights for private initiatives or sponsorships for the operation and maintenance of public spaces can be of mutual interest. As part of the civic campaign “Münster bekennt Farbe” (Münster Shows Its Colours) for the sustainable improvement of municipal green structure, since 2007 volunteers have been successfully advocating the design and maintenance of tree pits, tree donations, and the sponsorship of playgrounds and green spaces.

However, it seems as if on both sides here – the public sector as well as private stakeholders – much untapped potential still exists. **Only 29% of the communities surveyed indicate that they often or frequently work**

with associations. A quarter of the municipalities work with merchant communities and associations, and only one in five municipalities cooperates with citizens' initiatives.

Municipalities can also provide targeted financial incentives for the private sector and owners to improve the amenity value of street spaces and squares, especially in peripheral areas, because as a rule, residents support the design of green areas and playgrounds in their own living environments with a great deal of commitment – if the necessary financial resources are available. **A large majority, namely 78%, of municipalities consider the improvement of district squares to be a (very) important measure for the qualification of public space. More than one in four municipalities consider the design of open space by residents a (very) important contribution.** Most notably, the cities in the urban development programme “Soziale Stadt” (Social City) have the chance to financially control and technically support the refurbishment and design of public space by private actors in urban and district areas with special development needs. Funds for the improvement of the living environment are also provided in the programme area of urban redevelopment. Exemplary in this context are also various municipal town square programmes, in which resources are provided over long periods of time for the design of district squares with citizen participation. However, municipal funding programmes and competitions also act as an incentive for private investment. **According to the survey, 65% of the municipalities consider the allocation of municipal funds (very) important in order to ensure Baukultur quality in public space. More than half think this in relation to municipal contests, such as façade competitions.**

Rules and regulations

The municipalities are responsible for the design, care, and maintenance of public spaces. This can be conceptually prepared in municipal practice, especially with respect to creative tasks in different subject areas and at different levels of planning. **Thirty-seven per cent of the municipalities have at their disposal a design concept for the city centre, 34% have an advertising system concept, and 24% have developed a lighting concept. Also with regard to statutes for design, maintenance, and advertising systems, the city centre has the highest priority. In neighbourhoods, the maintenance statute is frequently applied.**

Design manuals or primers for selected urban areas are another important course of action for controlling the Baukultur quality of public space. On the one hand, they make municipal design strategies understandable; on the other hand, they serve as a guide for owners and developers, whose buildings or utilisation offerings have a design impact on public space. Thereby, binding guidelines – such as for materials or colours of fixtures – are provided. **More than half of the municipalities consider design primers and other checklists (very) important in order to preserve Baukultur quality.**

In the allocation of building plots and in connection with the establishment of development plans, additional starting points to influence or define the design features in building construction that impact the cityscape present themselves. The commitment to certain concepts or procedures – such as the implementation of design competitions in the allocation of building plots, the securing of public right of way, or requirements for the

design of the environment – can be the subject of agreements in the framework of public urban development contracts or property contracts subject to private law. **But even if the different instruments in the vast majority of municipalities are regularly applied, about 44% of the municipalities still consider further improvements to the legal framework (very) important to achieve an improvement in Baukultur.**

Conclusion and Outlook

Already today, the 21st century is deemed the century of cities. Thus, it is at the same time the century of urban public space and urban green. In view of the upcoming changes in our society, the essential fields of action for the quality of urban life lie here. The large infrastructural issues in the maintenance and renewal of roads, bridges, piping systems, and green and water areas challenge urban planners, architects, engineers, and landscape architects to collaborate. In terms of Baukultur, the continuous adaptation to current needs offers the chance to fix past mistakes and to consistently formulate new qualities. Thereby a fundamental principle is valid: Each investment has to lead to an improvement in the quality of life in cities. Every possibility to actively shape the use or activation of synergies should be embraced with this in mind.

Thus, the investment backlog of recent years in technical infrastructure becomes a new and unique opportunity to invest the resources to be appropriated in a high-quality design of public spaces. Similarly, the structural adaptation to climate change, as well as the conversion and restructuring of brownfields for the future, open up comprehensive opportunities to bring new qualities into public space. The maintenance and renewal of existing buildings, infrastructures, and green spaces also contribute to this.

Especially in public space, the synergy effects that can be achieved by good design, but also by networking with other disciplines, are particularly high: New amenity values are attained through the reduction in road traffic, which in turn depends on the strengthening of new forms of mobility. A joint analysis of the individual issues requires proactive and holistic thinking in the municipalities. Baukultur has to be an indispensable part of this integrated approach and become an essential argument in the focus on investments, priorities, and synergies in public space.

Moreover, the inclusion of stakeholders and the population increases the value and durability of public spaces. The equipment and design of public spaces not only determines the appreciation that they experience in public, but also the identification and quality of life that connects residents with their living environment. Therefore, participation, in particular, the participation of urban society in public spaces, plays a key role. To make open spaces available – which allow for experiments and interim solutions, participation in design, and responsibility for care and maintenance – promotes social cohesion and conflict-free cooperation. The results of the population survey presented here offer a very good guide: Certain qualities

in public spaces – such as the proximity to nature and the easy access to infrastructural facilities – are valued and desired, while non-maintained buildings, streets, and squares significantly reduce the attractiveness of cities. The population's participation in the development and implementation of these desired qualities not only reduces the financial burden, but also promotes design richness and diversity of use. Design and maintenance campaigns for public space contain within themselves the Pareto Principle: achieving great benefits with limited funds. They are thus the order of the day.

Planning Culture and Process Quality

Baukultur is more than what is visible in realised and built form. Baukultur is a process culture and also references the path that leads to good results and the types and forms of negotiation for the later design of the built environment. Also crucial is the way in which various stakeholders are integrated. Thus, it is not only about the culture of building itself, but also about the culture of planning and the quality of such a process. They are inseparable elements of Baukultur quality.

Good Arguments for Baukultur – What Can Be Achieved with Good Planning

As a “culture of planning”, Baukultur covers a broad spectrum. In procedures and processes, appropriate solutions must be found in the area of tension between environmental, social, and economic demands. For the question of how procedures and processes have to be designed so that they produce the suitable substantive solutions, fundamental expectations should be defined. They relate to the roles and responsibilities of stakeholders, as well as qualities and criteria for the procedures themselves. As a planning culture, Baukultur considers these expectations and qualities in its processes and creates through them liveable urban spaces.

Role Model Function

The public sector shoulders a special responsibility for Baukultur processes. Not only in its role as developer, but also as an author framework-setting plans, as well as development and approval authority, the public sector significantly influences the quality of the built environment. Also in the form of subsidies – from urban development promotion to art-in-architecture programmes – it sets thematic priorities and formulates quality criteria. Thus, it has a role model function, in which the municipal companies and enterprises are also included. In addition, they can be pioneers and demonstrate paths into the future by means of initiating innovative projects and by setting quality standards, thus also teaching private developers the material and immaterial values of good design and building through innovative projects – for example, in the energy and monument-related refurbishment of the municipal building stock.

Interdepartmental Planning

Building and planning tasks rarely fall within the remit of a single department: Are the grounds of a youth centre a matter for urban planning department or the youth welfare office? Is a roadside strip a green space or traffic space? According to the municipal survey, the variety of aspects that contribute to the Baukultur quality of built living spaces – from design to functionality, from economic viability to social and technical aspects – illustrates how important professionally integrated action is here. Future-oriented planning and Baukultur is therefore characterised by an interdisciplinary and interdepartmental working method, in which design standards are also discussed and defined. Such interdisciplinary work is necessary, because many interdependencies exist between the individual functions. Only if the consequences of decisions are kept in mind from the very beginning, and solutions between the different stakeholders are negotiated at an early stage, can later problems be avoided. The integrated approach is essential from the outset, because even at the level of goals, it is a matter of defining a balance between the different demands of urban development – such as environment, economics, social affairs, demographics, and urban development – and connecting the various department-specific aspects for implementation on the ground.

Multilevel and Intermunicipal Planning

Current major projects show that good cooperation at all levels of planning is of great importance. Especially infrastructure projects rarely stop at municipal borders, and they have different responsibilities: state and road companies, energy companies, utilities, etc. The uncoordinated and technically unilateral execution of tasks can lead to protracted processes, increased costs, and functionally designed spaces where design and social aspects are ignored, and the potential of the efficient use of public and private investment funds is insufficiently exploited. Therefore, the establishment of a Baukultur communication process across different levels and between specialist disciplines has to be the objective of the joint action.

In relation to issues of commercial space settlement, aspects of supply, and the designation of living space, intermunicipal cooperation is of great importance. Institutionalised or informal coordination between cities helps here to take location decisions in a regional context; the sustainable effects develop as a purely municipality-related consideration. In addition, intermunicipal cooperation strengthens the municipality's negotiating position with respect to professionalised and internationalised investors.

Space for Planning Preparation – “Phase Zero”

Even before the start of a project, thus before the actual performance phases according to the Honorare für Architekten und Ingenieurleistungen (HOAI, Regulations on Architects' and Engineers' Fees), there is “Phase Zero”. Here, the definition of needs and objectives is attributed significant weight. The phase of the clarification of the building project up to the planning idea is highly important because the decisions taken here have far-reaching consequences for architecture and urban planning, as well as the economic and environmental quality of the building. It simplifies later project management and increases the Baukultur quality if the core

objectives of a project are clearly defined from the outset and can provide an orientation framework. The project planning phase includes the careful analysis of the situation and the required actions. Especially with specific questions for which only fragmentary insights exist, drawing up preparatory expert opinions and studies is recommended. Only through an appropriate information base can the effective concepts develop that avoid consequential effects – such as relocation or displacement.

Culture of Participation

In the ideal case, participation today uses the creative potential and knowledge of many, not just the experts. Organising such participation, and bringing together the knowledge in a productive design, is the task of the process owners, like architects and planners. Thereby, in the design it is neither a matter of the implementation of wishes without reflection, nor of the lowest common denominator. Arbitrariness and loss of identity would be the consequences. Nevertheless, debates about the best solution are important. In doing so, a precondition is to move away from specialist terminology and to find a language understandable for everyone. This is the only way communication can take place at eye level.

Each of the different planning constellations and increasing social diversity make it clear that today participation concepts with strong local and regional contexts and individual communication strategies are in demand. The important basic criteria for participation processes include a careful concept in the preliminary stages, in which the objectives, the scope, framework conditions, and relevant stakeholders are defined. Successful, “real” participation processes in building and planning processes are defined further by early involvement of all parties affected by the measures, as well as clear formulation and communication of the goals and expectations. In addition, transparency and openness are criteria for successful participation. Conflicts between residents and those responsible for planning arise primarily when the goals of plans have been improperly communicated, the procedures are not transparent enough, or the results appear unbalanced. Only occasionally is there an unbridgeable conflict between the planning objectives and the wishes of the affected parties; usually this is a communication problem, which points to the importance of a proper communication culture as a crucial component of Baukultur.

Guidance by the public sector remains central in participatory processes. If this is missing, the peril grows that assertive social groups push their special interests, and a real social negotiation process cannot take place. The ideal of genuine participation includes equal communication that which is supported by the public sector. That means in many places, enabling participation and making groups who do not see themselves as responsible or do not feel able to participate “capable of speech”. This also includes strengthening the importance of Baukultur quality for society in both formal and extracurricular education and linking Baukultur education and participation more intensively than before. The activities of the Chamber of Architects – e.g., “Architecture macht Schule” (Architecture in Schools) – as well as the numerous associations and foundations already offer valuable approaches.

Ludwigsburg Model

Holistic Urban Development through Dialogue and Networking

The City of Ludwigsburg pursues an integrated urban development policy. The main instrument is the urban development concept "Opportunities for Ludwigsburg", which was deliberately conceived as a guideline that can be updated and further developed. Already in 2004, a process of intensive public participation had begun for this purpose, from which a culture of dialogue developed. In regularly held Future Conferences, principles and objectives from eleven strategic urban development topics were reviewed, approved, and updated. Each topic was in turn based on a separate master plan defining goals, projects, and responsible parties. In this way, urban development became tangible and transparent to citizens. Competitions (e.g., to redesign the Akademiehof) and design manuals (e.g., for the Hartenecker Höhe residential estate) also contributed to this. The administration supports these processes with the Department for Civic Engagement and the cross-sectoral department Sustainable Urban Development. The master plans were upgraded to a central control element; they align the sectoral measures with the urban development concept objectives. This shows that strongly integrated, working urban development must also be connected to a further development of existing structures if it is to achieve sustained success.

Involved Parties: City council, city administration, panels of experts, citizens

Coordination: Geschäftsstelle Stadtentwicklungskonzept (Holger Hess & Martin Kurt 2004–2008) / cross-sectoral department "Sustainable Urban Development" (Peter Fazekas since 2008)

Milestones: Department for Civic Engagement (since 2004), Urban development concept "Opportunities for Ludwigsburg" (since 2004), District Development Plans (DDP) (since 2007), cross-sectoral department "Sustainable Urban Development" (since 2009)



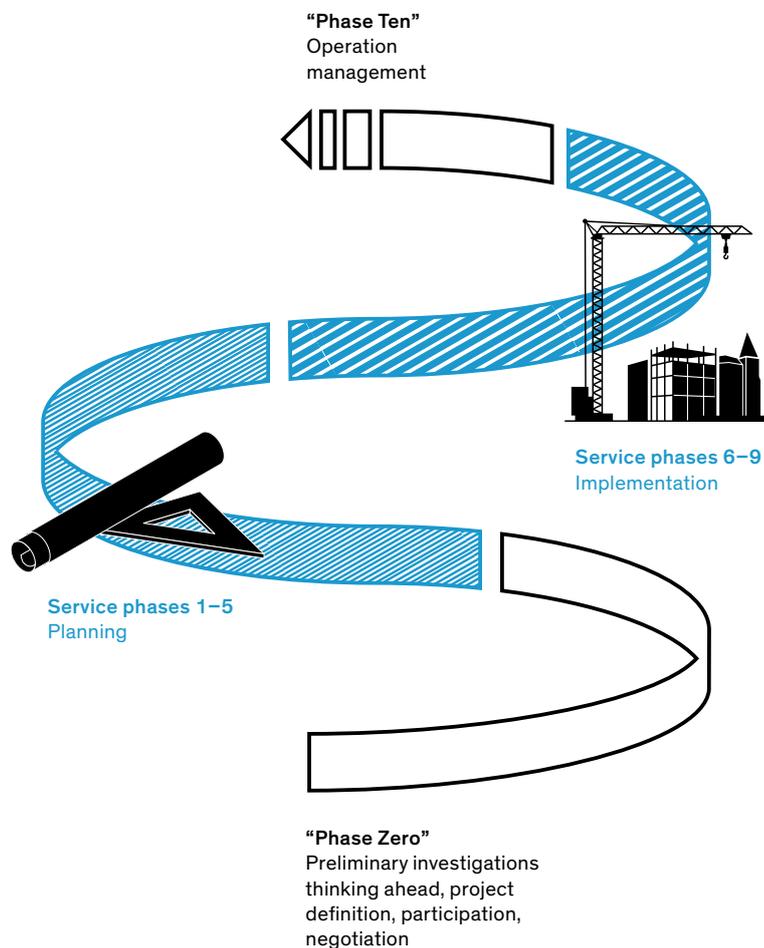
Improving the culture of participation also includes a change of perspective – away from quantity towards quality: It is not the number of participants at an event, but the quality of the results that defines the quality of the process. In some places, that also means accepting that parts of the population have no interest in participating in planning decisions. A high number of participants in the process of planning is not a guarantee of good planning culture, and not every planning decision has to be made jointly by all. Moreover, not all themes are “participation suitable”. Certain competences cannot be let out of expert hands; rather, it is important to define from a technical point of view the framework within which participation is possible. The goal has to be that decision requirements and participation offers are synchronised in the planning process in time and scope.

Use and Appropriation – “Phase Ten”

After the HOIA performance phases 1 (basic data) to 9 (documentation) comes “Phase Ten”, because Baukultur does not end with the built object. The subsequent use of the buildings is also a part of the Baukultur negotiation processes, since conflicts often arise because the later use was not fully anticipated in the planning process or was too weighted to one side. In this context, the evaluation of realised projects and the optimisation of results make sense. For this purpose, there should be funds budgeted or reserved for any necessary adjustments, and the unexpected should be approached with the aim of learning from it in preparation for the next step

Expansion of the HOIA service phases with “Phase Zero” and “Phase Ten”

Source: Federal Foundation of Baukultur 2014



and the next project. Baukultur is also reflected in not determining everything and for offering space for development. Allowing possibility space makes public spaces as well as private building projects robust in the face of changes in user behaviour and facilitates appropriation and identification.

Responsibility

In addition, it is a matter of reorganising responsibility for the creation and maintenance of buildings and spaces. For the future, the public sector's financial and staffing framework conditions mean that everything can no longer rest on government shoulders. At the same time, however, the assumption of responsibility by the private sector – in business or civil society – means that a discussion has to be conducted on how far the influence of these stakeholders can go. There always remains a necessary process of weighing private and public interests, and already this discussion on the level of balance is an involvement with Baukultur, because one does not assume public and private interests to be incompatible from the outset. The aim must be to form a community of responsibility for the city, which together strives to implement the respective urban development policy principles.

Status Quo and Current Developments

These expectations for high-quality planning processes are part of the Baukultur understanding. They define a goal, which should be strived for in every new measure and every process started. This is not always possible. In some projects, these ideals are overlooked, other dynamics determine the direction, so the processes do not achieve the quality that they could have.

Collaboration between Specialist Disciplines and Departments

Changed framework conditions lead to expectations of the culture of planning and in the future acquire even greater importance. In German cities, planning initiatives and structural changes will be needed on a large scale over the next few years. Climate adaptation, energy transition, and demographic change are just the three challenges already presented that clearly show the planning and structural demand for action for the coming years and decades. In addition, the discussion about how to deal with the refurbishment of the existing post-war building stock in need of refurbishment is in full swing. This presents major challenges for public housing companies in particular, but also municipalities themselves. Entire neighbourhoods, such as the single-family housing areas of the 1950s and 1960s, are facing a transformation process, because here a demographic change is taking place, and infrastructural deficiencies have to be remedied. These and many other complex tasks require inter-departmental work at the municipal level and closer cooperation between the different professional planners, architects, engineers, and related disciplines. [Already, three-fourths of all German municipalities implement interdepartmental cooperation based on the situation or topic. So far,](#)

however, this is institutionalised and part of everyday administrative action in only one in three municipalities.

A prerequisite for professional and interdepartmental planning and decisionmaking is the agreement on common goals. For this purpose – and for communication with and involvement of the public – guidelines, integrated guide plans, and high-profile formats are important. The City of Wolfsburg has lead the way by setting up the interdisciplinary “Arbeitsgruppe Baukultur” (Baukultur Working Group) for internal, administration discussions of Baukultur, and to generate public discussion it established the “Forum Architektur” (Architecture Forum), to address the mediation of architecture, communication, and holistic thinking. **Integrated approaches are becoming established nationwide, though rather hesitantly in municipal practice: 24% of the municipalities surveyed stated that they have already developed an integrated urban development concept for the city as a whole or have one in the pipeline. Still, a discussion of guiding principles was conducted in at least 43% of the municipalities. At the neighbourhood level, integrated urban development concepts were developed by 46% of the municipalities and guiding principles by 36%.**

The dissemination that integrated urban development concepts are currently experiencing is closely linked to urban development promotion. In individual programmes, there have long been corresponding minimum requirements for support, and since 2012 they have been required for all programmes. In programme year 2011, integrated urban development concepts were adopted for 56% of all funded overall urban planning measures. In individual programmes, such as “Soziale Stadt” (Social City), such a concept exists for around three-fourths of the programme areas.

The development and use of these instruments, however, is taking place under the pressure of a declining workforce: In municipal administrations, a downsizing of 185,000 positions occurred from 2000 to 2012, which is a reduction of 12%. Also limitations in the work of building authorities and municipal urban planning offices are directly connected to this. More upheavals with consequences for the quality of construction and planning processes are expected here in the future: In public administration, the average age of employees is steadily increasing. Currently, a large portion of the state and municipal staff is older than 45 years of age. As a result, there is a risk for the near future that “tacit knowledge” – the implicit practical knowledge that cannot be taught through formal training – is being lost. This contrasts with the increasing professionalisation and internationalisation of some areas of the private building sector, with the result that the public sector’s position as a qualified negotiating partners and representatives of public and community interests is weakened.

Collaboration between Developers and Architects

Structural changes have also appeared in recent years with other planning and building stakeholders. In 2011, the magazine *Baumeister* (Master Builder) asked 33 renowned architects in qualitative interviews about their work practice and established that they assess the relationship with developers as increasingly difficult. In addition to conflicts that are substantive in nature, which are based on different ideas and desires, the clients have changed in some areas. Clients – in the form of committees,

Nya Nordiska Expansion, Dannenberg
A Company Expansion in the Historic City Centre

The textile company Nya Nordiska did not expand its location "in the open countryside" but in the middle of Dannenberg's historic old town, which is characterised by residential buildings. The old timber-framed head office was expanded by several new buildings into an urban ensemble with an area of 4,100 square metres. The new building takes up the gabled roof forms of the surroundings with its shed roofs, integrates into the existing urban form, and completes the historically evolved provincial space with new functional attributes. Vital for the good cooperation between the developer and architect was that the developer consciously assumed his role and responsibility in the process. This began with the selection of property in a central location – also as a contribution to the revitalisation of Dannenberg's city centre – followed by an architecture competition, a realisation process with the understanding of constructive problem solving by all parties, and extended to the targeted selection of regionally established medium-sized companies for the construction. Thus, the expansion of Nya Nordiska's production site not only exemplifies the city centre mix of living and working, but also the successful integration of new construction in the historical context and an understanding of the construction process as a collaborative work of developers, architects, and the companies executing the work.

Developer: Nya Nordiska Verwaltungs GmbH, Dannenberg
Architecture: Staab Architekten, Berlin
Support Structure: ifb frohloff staffa kühl ecker, Berlin (Permit); Peter Martens + Frank Puller Ingenieurgesellschaft mbH, Braunschweig (Execution)
Landscape Planning: Levin Monsigny Landschaftsarchitekten, Berlin
Planning/Construction Period: Competition 2008 / Competition 2010



project developers or controllers, and other representatives – often require that decisionmaking powers be blurred or not present at all, and the developer becomes more difficult to identify and harder to grasp. For architects, this increasingly leads to the loss of the developer as a real person. Just securing the cost, schedule, and quality objectives, however, depends inter alia on necessary decisions in the project process being taken in a timely manner and by competent and authorised people.

The architects surveyed also feel pressured by developers' increasing control requirements. The numerous standards and regulations, which have to be considered in any building project, become the basis for assessing the quality and design. Thereby, project participants lament a lack of trust that too early and too often leads to litigation. Internal or external conflict resolution mechanisms, with which these disputes could be settled at an early stage, are lacking. As a result, the level of conflict may increase further in the process, which leads to disturbances in the course of the project as well as to further conflict and may encourage an "atmosphere of mistrust" between developers, architects, and building companies. The increasing involvement of lawyers in the planning and building process is proof of that. This constellation is frequently augmented by the fact that the allocation of building and planning services in the context of the selection procedures according to the Vergabeordnung für freiberufliche Leistungen (VOF, Regulations for Freelance Services) too often occurs solely based on the financial award criterion of the offer price. The consideration of the bidder's competences is secondary, which can lead to projects that are too narrowly budgeted with significant conflict potential.

However, open-minded private developers, especially from the business world, are increasingly discovering the added value of Baukultur for themselves. Ulterior motives in this case are the office's relevant images for the corporate profile, as well as the promotion of corporate culture and employee motivation through an attractive working environment. Especially in the service economy, the corporate headquarters is becoming the business card. A high-quality Baukultur planning and design have an image-defining effect here. On the other hand, responsible developers are committed to the social obligations of ownership, as derived from section 14 paragraph 2 of the Basic Law. They understand their building projects not only as their own project, but also its effect on the environment, urban space, and as a part of the city identity. Baukultur thus becomes a part of a company's corporate responsibility. Also for the housing industry – especially in relaxed housing markets – a unique characteristic arises through high-quality and appropriately maintained building stocks.

Public Participation in Building and Planning Processes

Citizen participation and urban development currently enjoy special social and media attention. Meanwhile, more involvement is associated with "participation" than the compulsory two-stage participation process with early public participation and public design in the German Federal Building Code. At the latest since 2010 – the height of the protests against Stuttgart 21 – the talk is of a new culture of protest, which was initially ignited by large-scale projects, but now even small projects can be used as an opportunity to express criticism of planning procedures and their substance.

Media coverage in recent years suggests that the quality of this process has declined. It is especially the building projects attaining nationwide prominence that receive a media response, which refer primarily to problems and conflicts in the building and planning processes. What effect this reporting has on projects – such as Stuttgart 21, the Elbe Philharmonic Hall in Hamburg, or the Berlin International Airport – on the public's understanding of Baukultur is not foreseeable. **According to the population survey, citizens currently hold the relevant politicians first and foremost responsible for delays in building and planning projects. Civic protest movements against large public projects, however, are perceived more as corrective; only 28% of the population deem them responsible for delays.** In many initiatives and inclusive discussions, not only are earlier involvement as well as transparent and open procedures required, but so is genuine, substantive participation.

Especially with the topic of participation, the quality of the process is essential if it is not to become pure "Participation" – i.e., an ineffective staging of participation that is an end in itself. First of all, "participation" is an open concept that is often used to describe process, which primarily serves to broker information. Every form of participation requires an actual and open, communicated and visible possibility to influence relevant decisions. If this is not the case, participation can trigger frustration. With this narrow definition, hardly any statements are currently possible about how the participation in building and planning processes in Germany is commissioned. A Difu study from 2013 on current forms of citizen participation shows, however, that municipal participation processes are preferably used in the context of formal processes or those informal processes that are used to convey or gain information about planning. So far, processes for actual co-decision by the population have been comparatively rare. The study comes to the conclusion that there is apparently still no "equal footing" between citizens and the city administration.

Even if interest in participation on the part of the population is categorically shown – according to studies by the Bertelsmann Foundation 2011, 81% of the population want more participation and greater voice – only a few citizens currently avail themselves of the individual information and participation opportunities in planning projects and building measures. **Within the existing information and participation reality, citizens participate most often (29%) through petitions, and this is more the case in large cities than in smaller municipalities. In smaller cities, however, information channels and participation opportunities based on personal contact are more common than in cities: Direct contacts with the administration or to council members, participating in city council meetings or its committees are used here more than in large cities.** This corresponds to the aforementioned Difu study, in which over 30% of the interviewed skilled personnel in the municipal administration indicate that participation has only low or very low importance for the population. In particular, efforts to actively involve the younger residents of the city in discussions on Baukultur have thus far been inadequate. **The population group of under 30-year-olds is significantly less active in participation than other age groups. Only in protests, demonstrations, and Internet discussions does the opposite picture appear.** To that end, projects that promote young people's design

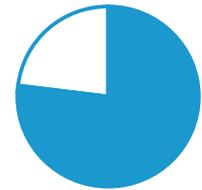
Adequate information among the population

All in all, do you feel adequately informed about the building process and building projects in your living environment?

Source: Population survey on Baukultur 2014 (Forsa, on behalf of the Federal Foundation of Baukultur)

no, I would like to learn more

23.0%



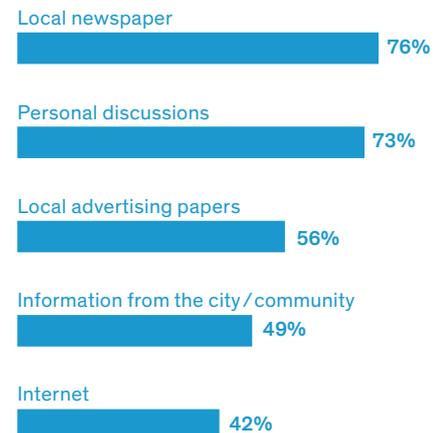
yes

76.0%

... via local newspapers and conversations

The five most important information sources for citizens on building measures in the place of residence.

Source: Population survey on Baukultur 2014 (Forsa, on behalf of the Federal Foundation of Baukultur)



will, inventiveness, sense of responsibility – and offer them the space for this – make a valuable contribution. Since 2009, the Bundesinstitut für Bau-, Stadt- und Raumforschung (BBSR, Federal Institute for Research on Building, Urban Affairs and Spatial Development) has accordingly supported various pilot projects in municipalities with the research field “Jugendliche im Stadtquartier” (Young People in the Neighbourhood) and gained experience from this on how young people can be involved in urban development.

Negotiation Processes

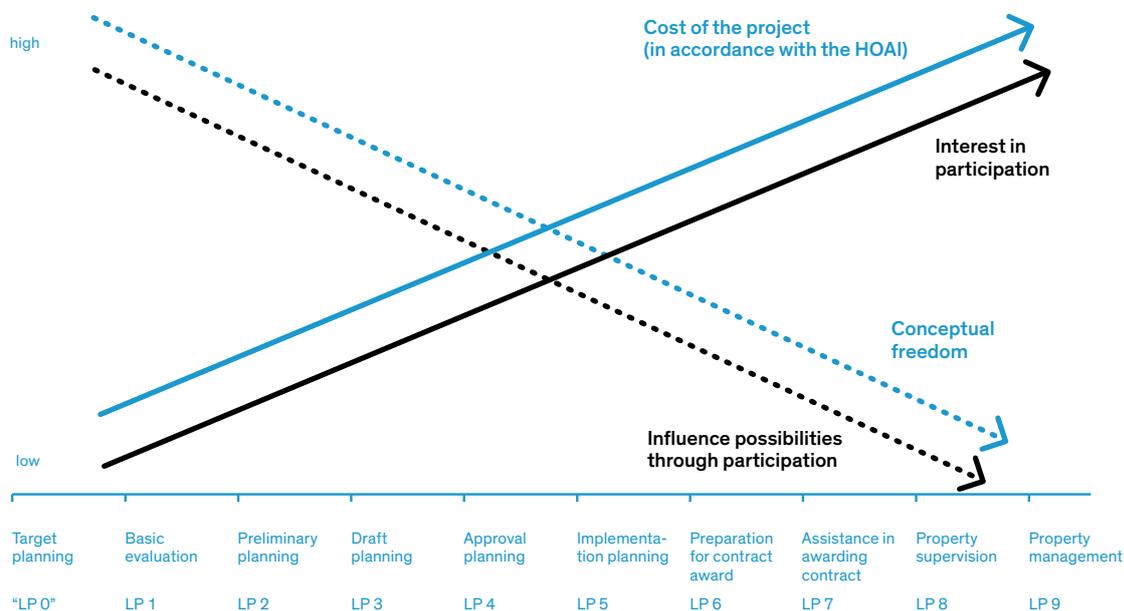
Baukultur not only encompasses the planning and building processes, but also the treatment of the built environment, and thus always has a social component. The right to the city – which describes equal access to the city’s benefits – is claimed by various social groups. Conflicts around the keyword “gentrification” are part of the debate and are now also firmly anchored in the media. Discussion on “affordable housing” was also consistently topical in various development stages in Germany and is presently the centre of interest again. Therefore, Baukultur also means discussion on social principles that should underlie the planning and design of cities and that manifest themselves in the built and designed implementation.

A purely top-down planning philosophy is neither desirable nor feasible in this context. The stakeholder field becomes wider; the population moves into action especially when their personal living environment is affected. The differentiation of our society is also leading to a decreasingly self-evident “common sense” that can be assumed or built upon; instead, it is a matter of balancing different interests.

Baukultur dilemma

Development of conceptual freedom, use of funds, and participation in the project

Source: Federal Foundation of Baukultur 2014



Baukultur quality emerges thereby through communication and mediation. It is likely that the importance of the Internet as an information source will continue to increase in the future. The use of new media enables the inclusion of especially younger generations under 45 years of age, who use the Internet more intensively as an information source than older generations. Planning in the digital age offers new opportunities for involvement and participation. Web 2.0 applications can facilitate cooperation within public administration in the same manner as with citizens. **Only about half of all municipalities are currently making their first experiences with network-based cooperation and communication.** These methods are still socially highly selective. The “Digital-Index” from the non-profit, privately supported initiative D21 shows, for example, that higher levels of education in online usage still clearly prevail. A breakthrough and thus the natural use of Internet-based instruments in participation practice are still pending.

Importance of the Early Project Phases and the Evaluation

Relating to participation, the question of the “right” time always arises. In the process of planning and structural implementation, two opposing trends are typical: On the one hand, the degree of conceptual freedom and the influence on the result at the beginning of the process are high but decrease strongly in the early planning phases. On the other hand, the use of resources for planning and implementation fees is low in the first phase and increases dramatically over the course of implementation. This is associated with a Baukultur dilemma: The guiding project phases are provided with the lowest volume of resources. Regulation on the HOAI, for example, begins with service phase 1, which includes a basic evaluation. In building construction, but also in transport planning, it is set at only 2% of the total fee. A “Phase Zero” slotted in ahead – in which a needs analysis and target planning, and thus also the planning of the participation in the process can take place – is not provided in the HOAI. A “Phase Ten” – i.e., the assessment and evaluation of a finished project – is also not included.

Errors that are made at the beginning of the planning process can later lead to delays and additional costs. According to a study by the market research firm Bauinfoconsult, in the assessment of interviewed industry stakeholders, 12% of the total turnover in the construction industry is apportioned to failure costs – i.e., bad planning, computing, communication, or execution errors. Many of these errors could be avoided by a more careful project planning at the beginning of the process and could thus increase the quality of planning and building, as well as minimise the later expenditure of time.

In addition to an enhanced “Phase Zero”, it is equally applicable to strengthen the followup and evaluation phase, the “Phase Ten”. The approach “After the project is before the project” allows the optimisation of future processes and procedures, if previous pitfalls and shortcomings are identified. For example, the City of Gütersloh carried out an evaluation of completed development plans in order to find ways in the future to integrate urban development objectives more closely with the development plan process.

Competitions

To further strengthen the Baukultur process and outcome quality, a range of hard and soft instruments are available for cities and municipalities. With the toolbox “Kommunale Kompetenz Baukultur” (Municipal Competence Baukultur) from the Bundesministerium für Verkehr, Bau und Stadtentwicklung (BMVBS, Federal Ministry of Transport, Building and Urban Development), soft instruments in particular were prepared in 2012 for practical use at the municipal level.

Thereby, one of the most well-known tools to strengthen Baukultur qualities are competitions in the building industry. The Richtlinie für Planungswettbewerbe (RPW, Guidelines for Planning Competitions) states in its preamble that “this quality can most likely be achieved and maintained with the aid of the ideas competition for the best solution for urban development, architectural, structural, constructive, or artistic tasks”. Planning competitions are also a means of communication between all participants and future users, because several design works on the same subject illustrate alternatives and facilitate a discussion about the most appropriate solution.

Since 2004, between 250 and 350 planning competitions have been tendered annually in Germany. The public sector is responsible for the majority of them, despite the considerably lower share of public construction investments compared to private projects. Since 2004, federal, state, and municipal governments have carried out almost twice as many competitions as private clients. **Three-fourths of all municipal planning authorities assume that private developers rarely or never use competition processes. Thereby, certain types of building projects are especially affected: 93% or 84% of all cities stated that particularly in commercial or retail building, competitions are rarely or never used.** But the privately owned everyday structures largely determine the appearance of German cities.

One reason for the significantly higher number of public competition offers also lies in the fact that contracting authorities are obliged to apply for services throughout Europe, according to the VOF, if the estimated fee volume exceeds a threshold of 207,000 euros. But beyond this legal commitment, federal, state, and municipal governments see themselves in their role model function and have frequently set voluntary commitments to use competitions for their own building projects. **Thus, about a third of the surveyed municipalities indicated that competitions are often or at least frequently used in their own municipal construction projects.**

The common opinion of builders – that competitions are expensive and time-delaying – should be reconsidered: A 2013 study by BMVBS on expenditures in the awarding of planning services was able to prove that negative effects of the award process on the time and monetary expenses are not ascertainable. The Hesse Chamber of Architects and Town Planners has even shown, through evaluations of completed projects, that up to 10% of construction costs can be saved through competitions, and in addition to the Baukultur improvements, financial improvements can also be achieved. Nevertheless, the majority of public contracts are still awarded through

the VOF, following which the cheapest provider is awarded the contract. If, however, monetary criteria prevail, scope for technical innovation or design experiments is hardly a given.

In the majority of competition processes in Germany, it is a case of restricted or limited competitions with an upstream application process. In contrast, considerably less than 10% of the competitions are open competitions that enable all professionally qualified interested parties to participate. The obstacles in the application process – like the number of comparable references and details on the performance of the offices – are often too high for small offices in particular. In addition, the competition processes are in some cases a downstream VOF process – i.e., the winners must prevail again in a VOF process against offices classified as subordinate. In addition to the offering price, what matters above all is economic performance, so that it is especially difficult for young offices to make an innovative contribution in this marketplace of ideas. Therefore, open competitions should be granted priority where possible.

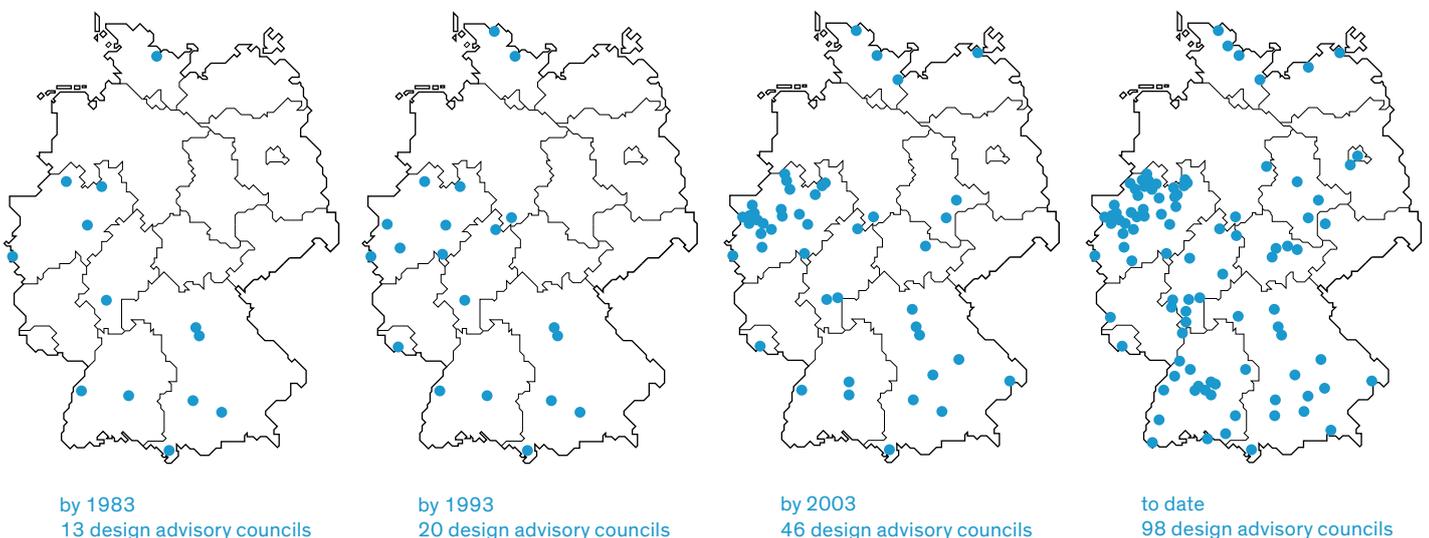
Design Advisory Councils

Design advisory councils consist of a group of independent specialists – thus usually not local – who interdisciplinarily examine the project in terms of its defining effect on the cityscape and issue recommendations. Their sessions can take place in public and their results are published. Design advisory councils see themselves as intermediaries between the interests of the developers and the general public. They not only take the building into account, but also its embedding in the urban body and in the local design tradition. With their professional competence, they provide support for a higher project quality in the sense of Baukultur. In a listing from the Förder-

Number of design advisory councils is growing

Number and distribution of design advisory councils in Germany

Source: Friends of the Federal Foundation of Baukultur e. V., 2014





Design Advisory Council, Regensburg
Model for Baukultur Advisory Committees
in Germany

Design advisory councils contribute specifically to the qualification of private building projects, by giving constructive advice during the planning phase. Through its activities across Germany, the Design Advisory Council Regensburg has earned an exceptional reputation. Since its establishment in 1998, about 300 individual projects have been discussed with the council, of which 164 building projects have been implemented, for example, the reconstruction of a corner shop at Kohlenmarkt (photo: original from 1907, before and after the reconstruction, 2004 and 2005). The legal framework and composition served many cities – such as Lübeck, Trier, Karlsruhe, and Leipzig – as a model for establishing their own design advisory councils. This also applies to public meetings, which contribute to better information for the public about upcoming building projects. The council's positive Baukultur effect shows that even the "soft" instruments – which rely on support and persuasion – are also particularly suited to improving the quality of planning and construction.

Existence: Since May 1998

Head of the Office: 1998–2001 Klaus Heilmeier /

Since 2002 Tanja Flemmig

Coordination: Johanna Eglemeier

Current Design Council Advisors: Prof. Dr.-Ing. Paul Kahlfeldt, Berlin; Prof. Uta Stock-Gruber, Buch am Erlbach; Prof. Michael Gaenßler, Munich; Prof. Ingrid Burgstaller, Munich; Prof. Victor López Cote-lo, Madrid; Architect Elke Delugan-Meissl, Vienna

verein Bundesstiftung Baukultur e. V. (Federal Foundation of Baukultur Friends' Association), there are nearly 100 design advisory councils in Germany. Their number has increased significantly in recent years, and in the last ten years, it has more than doubled. New design advisory councils were established primarily in North Rhine-Westphalia and in southern Germany.

Given the fact that institutionalised design advisory councils are found mainly in large cities, and smaller towns are often overwhelmed by the organisational and financial effort, since 2011 the architects' chambers of Bavaria, Baden-Württemberg, and Hesse – and Mecklenburg-Vorpommern in a pilot scheme since 2013 – have set up mobile or temporary design advisory boards. The members of these temporary design advisory councils are assembled individually for the municipality offering the assignment. Their activities do not differ from the work of institutionalised design advisory councils. From the perspective of the four participating chambers, this model should also awaken the interest in smaller cities for their own permanently established design advisory councils.

Prize Procedures

While competitions and design advisory councils start at the beginning of the planning process, prizes and honours for high-quality projects are awarded after their completion. The "Handbook of Baukultur" from the Federal Foundation of Baukultur lists 107 regularly awarded prizes, awards, and honours in planning and building. These include national prizes, such as the Deutsche Bauherrenpreis (GdW, German Developer Prize), the Deutsche Städtebaupreis (DASL, German Urban Development Prize), and the Nationale Preis für integrierte Stadtentwicklung und Baukultur (BMUB, National Prize for Integrated Urban Development and Baukultur). Additionally, prizes for projects within a state or a region are awarded, such as the Brandenburgische Baukulturpreis (Brandenburg Baukultur Prize), awarded by the Brandenburg Chamber of Architects and the Brandenburg Chamber of Architects, and the Niedersächsische Staatspreis für Architektur (Lower Saxony State Award for Architecture), awarded by the State of Lower Saxony. In addition, there are other municipal prizes.

Recognising outstanding examples strengthens the motivation of investors and developers to pursue high-quality Baukultur solutions. Furthermore, they also illustrate the possibilities of good planning and building for all stakeholders and the public. Personal feedback from developers shows that prizes and honours are suitable for expressing appreciation. They confirm the feeling of having chosen the right path – even if beforehand this was perhaps less calculable than standard solutions. Professional stakeholders, such as the housing industry, like using awards in marketing, and as a result achieve an added economic value.

Scope and Potential

The daily appropriation and shaping of space, the permanent need for new construction, and the renewal of the existing building stock offer the opportunity to constantly reflect on the culture of planning and building and develop it further. The scope for strengthening Baukultur exists with all stakeholders.

Stronger Interdepartmental Planning

In the municipalities and with many project sponsors, various approaches that promote interdisciplinary action are possible on the way to a self-evident interdepartmental working method. Project-based, interdisciplinary working groups, regular neighbourhood-related coordination meetings of different specialised departments, and administrative arrangements between individual agencies have proved in practice to be particularly useful. The improved processes contribute decisively to Baukultur, but the effectiveness of appropriate cooperation structures requires continuity: Communication structures have to be practised and maintained throughout the years in order to contribute to quality improvement in planning and building. Therefore, it requires clear political will, the appropriate structural conditions, and the mandate for all departments to work across disciplines. Federal and state funding for pilot schemes and temporary programmes, such as international and regional building exhibitions (IBAs, IGAs, BUGAS, etc.) were and still are an opportunity to develop new departmental and multilevel procedures and qualification instruments. They are a good source of innovations in planning and should continue to be used in their experimental and pioneering character as “a temporary state of emergency”.

Interdepartmental and multilevel planning can also be strengthened, if integrated urban development and interdisciplinary skills are continuously taught as early as the university education of architects, engineers, and planners and in teacher training. Similarly, it is a matter of permanent training, because high-quality building and planning processes also require suitably qualified personnel. Improvements in the processes are only possible to the extent that the knowledge and skills of the participants increase. Further training in the process offers good opportunities, which through joint work in interdisciplinary teams takes place quasi “naturally”. On the other hand, it is valid to strengthen qualifications of the participants through dedicated – ideally also interdisciplinary – training opportunities that can effect creative input for the planning processes on-site.

Participation and Cooperation in Building and Planning Processes

A major challenge is to reach precisely those populations who are considered “participation-alooft” and do not belong to those who make themselves known. These are, among others, residents with a migration background, but also households with time constraints. Here it is necessary to find specifically appropriate forms, ranging from multilingual lectures to childcare during a workshop discussion. Designing motivating and comprehensible processes that encourage different population groups to join the discussion remains an ongoing planning practice task.

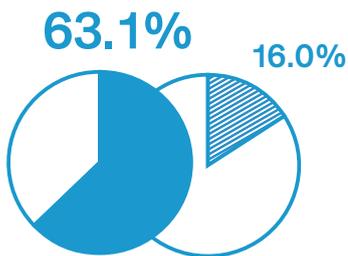
Offer and Interest

Two exemplary forms of citizen participation that ...

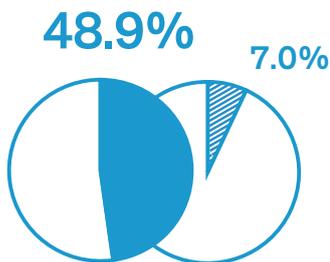
Source: Municipal survey on Baukultur 2014 (Difu, on behalf of the Federal Foundation of Baukultur) & population survey on Baukultur 2014 (Forsa, on behalf of the Federal Foundation of Baukultur)

... proved successful or highly successful from the perspective of the municipality

... were used by citizens in the last 12 months



public meetings / residents' question time



ideas competition with citizen participation

Thereby, the existing spectrum of methods of information and participation processes is large and sufficiently represented in many handouts. Each municipality develops its own participation culture. Instruments that function in one location are not necessarily successful in another place in the same way. Nevertheless, an exchange of instruments is productive. Implementation requires creativity and flexibility, as well as the political will and the actual support of the administrative management levels. To support the exchange between the population, the administration, and the responsible parties from politics, good possibilities are, for example, joint city walks or city tours, as well as exhibitions and public city models. In a narrower sense, these are not participation instruments, but tools for information transfer and communication – though the transitions are fluid. They can also be used as an introduction to a deeper participation process.

Opportunities for participation are used more intensively by the population when the purpose of the participation is more concretely and clearly defined. Participation is even stronger when creative public relations occurs and an inspiring process is chosen. **However, special formats – e.g., Charette processes, Open Space, World Café – have not been used by more than two-thirds of the municipalities. Other methods that have been used successfully from the perspective of many municipalities are round tables and workshops, as well as ideas competitions with citizen participation.** Through suitable and attractive public relations, the awareness of and participation in these processes can be further increased.

Another promising instrument is contingency funds, which are allocated from urban development programmes or municipal budgets. Citizens decide on a self-organising basis for what purpose this budget should be used. As a result, smaller projects are supported, which are developed with self-initiative and supplementary private capital. Contingency funds are able to support the activities of local stakeholders and to promote civic commitment to Baukultur goals. Private initiatives can also be strengthened, if appropriation opportunities are created and spaces of possibility remain. This can be the use-neutral design of squares and spaces, temporary use offers on brownfields, or so-called white areas in the land-use or development plan, which consciously remain unplanned and only at a later time are functionally and creatively defined.

Strengthening Baukultur Values with Private Developers

To strengthen Baukultur, the public sector also has at their disposal “harder” control mechanisms. It has a particular opportunity for action through its land policy. An active, strategic land management especially increases municipal opportunities for action, because beyond the sovereign influence possibilities, differentiated and tailored arrangements can be reached on the level of private law that promote good planning and building. The sale of property in the fixed-price procedure at the fair market value can be made subject to conditions, such as a required consultation with design advisory council, the consideration of design guidelines, or the execution of a competition. Through the form of the allocation, the municipality also defines the spectrum of subsequent uses and – especially in the area of housing – socio-political aspects. It is therefore worthwhile to lead a discussion at the municipal level about the extent to which municipal property

should be awarded not only based on the highest price, but also according to the substantive concept and social aspects in accordance with EU directives.

The range of instruments for an increase in Baukultur is large. Contests and design advisory councils have proved to be particularly effective. Competition should be included as a rule at least in the procurement procedures for all public building projects. For a Baukultur effect, attention should be paid here to the framework conditions. Especially with municipal competitions, the public sector is able to weight Baukultur criteria more strongly through corresponding consideration in the call for tender. These can be substantive as well as organisational requirements, such as the specification of interdisciplinary projects teams. Also to be taken into account is that for planning offices, the use of resources in the course of participating in the competition is already substantial. Even if the competition is an ideal instrument to ensure quality in a design, as well as functional and economic regard, the awarding authority should always be aware of the responsibility of the (economic) and creative use of resources. Competitions should always be promoted with the aim of commissioning. Thereby, the requirements for the competition task should be limited to required minimum, and the access so designed that young and small offices can also participate.

For greater transparency in the competition process, it is expedient to explain the judges' decisions publicly. This increases the understanding both among the participating agencies, as well as the interested public. Also exemplary is the approach by the City of Munich for the competition "Ehemalige Bayernkaserne" (Former Bavarian Barracks), in which an initial narrow selection of winners is discussed publicly before a determination of the final winner takes place. For this reason, it is also recommended that design advisory councils meet in public and communicate their decisions understandably. In this way, they also contribute to a more socially anchored discussion about Baukultur values. A correspondingly active public relations campaign once again reinforces this effect.

Offers such as building or building maintenance consulting, which more than two-thirds of the municipalities in Germany provide, are also suitable for sensitising private developers and owners to Baukultur issues. Here, the building consultancy areas in licensing authorities, which have often disappeared due to several personnel cuts, should be strengthened again. They help bring together the goals of the municipality and private developers.

Other forms that strengthen private Baukultur commitment build on an improved cooperation of local stakeholders in the respective locations. The value of a property or the sale of a retail operation depends to a large extent on the attractiveness of the neighbouring buildings and adjacent uses. As a result, situations often arise in which investments in the existing building stock are held back. Measures in which owners benefit from the investments of the adjoining owners – without being involved themselves – are awaited or free-rider effects used. Eigentümerstandortgemeinschaften (ESG, Owners' Local Community Groups), in which private, individual property, and building owners voluntarily join together, as well as Business Improvement Districts (BID), and Housing Improvement Districts (HID), which achieve a greater degree of obligation with the help of a public

statute, are thus good instruments to promote Baukultur investment in locations with the support of the municipality.

Strengthening Baukultur Competences in Education and Training

Despite growing participation in planning and building, there are still too few training formats in this country in which the perception and participation of the built environment is taught. But raising awareness in the population for the quality of the designed living space is an important task: Only those who know about projects, about concepts and framework conditions, are able to contribute constructively. Making citizens familiar with the methods and processes of spatial design enables them not only to understand these processes and their results and to actively participate in them, but also conveys deep insights into the functioning of a democratic society. It is advantageous to take the initiative at an early stage – in kindergarten and in school. A stronger “Baukultur Education” provides the basis for future qualified discussions about the design of the built, urban living environment and a strengthened awareness of each individual for his or her important role in this process.

Basically, the public debate about the substance of Baukultur for the improvement in the quality of our living spaces is essential. Locally promoting this debate about the appropriate formats – such as discussion meetings, excursions, publications, online tools, and events – is the task of all stakeholders, who are particularly concerned with the quality of the built environment. Herein also lies an approach for the development and implementation of an advanced training offer or postgraduate study at universities.

Conclusion and Outlook

A restrictive and difficult – in terms of the communication – planning, participation, and building process often leads to unsatisfactory built spaces. The quality of a competently planned, openly communicated, and professionally realised building project is recognisable by its appropriate and enriching design in the cityscape. By granting sufficient resources in the preconceptual phase – the so-called Phase Zero – framework conditions, objectives, and starting positions can be elaborated more precisely. Even if the time expenditure initially grows as a result, the early care minimises subsequent restrictions, additional costs, and conflicts, and eventually leads to savings in time. More than ever, integrated approaches are necessary to objectively determine and coordinate the complex relationships in existing structures. Well-built living spaces can only arise as a result of good processes.

Most current investments are in the existing building stock. Even in the cities, where large-scale new building measures are carried out, this usually takes place on previously developed areas within existing neighbourhoods. Therefore, there is a new need to deal with the existing building stock, to take the urban development context precisely into account in the preliminary stages of planning, and to tailor the new requirements to the existing

framework conditions. Integrated and holistic thinking also has to manifest itself in municipal administration and be reflected in the corresponding internal administrative organisational structures, for planning and building on an integrated and multilevel basis contribute greatly to finding sustainable solutions for the complex living space, city.

For the administration to appear professionally competent and capable of fulfilling its tasks with regard to information, consulting, and also planning and implementation of projects, political backing is required. Only when Baukultur becomes a common concern of administration and politics can the importance be conveyed to the outside world. Additionally, many tools and approaches are available for municipalities to strengthen the sense of responsibility for the quality of the built environment, from design advisory councils to competitions and prizes in which stronger and Baukultur values can be imparted or demanded.

However, planning and building predominantly in the existing building stock also requires a new kind of public relations campaign and stakeholder participation. Information, participation, and sharing of the local population gain a new significance. It is important to develop a results-oriented process planning, which includes participation at the right time with the appropriate formats. Good participation is professionally competent and designates a clear scope for influence by the public. Good participation takes all interested and responsible parties on board, and finds a balanced relationship between its own professional competence and the public with respect to new, sometimes unusual processes and ideas. Our own municipal survey as well as the population survey have shown that there is still much at the beginning here, because it is more the educated, older population groups who show an interest in planning and building projects. However, the surveys have also shown that in many places, there is great interest in the topics of planning and building. To ensure the necessary curiosity about Baukultur topics in others – above all to arouse younger populations – much awareness raising and information is still needed. If Baukultur topics are advertised, both in education as well as in the local press and free event formats, then much is being done for the comprehension of ongoing building projects, for good design, high-quality solutions, and their active appropriation.

Recommendations for Action from the Federal Foundation of Baukultur

Baukultur is crucial for the quality of our built environments and hence our life satisfaction – Baukultur is an investment in the future! The joint work of Baukultur combines all of the stakeholders who participate in the way the environment is designed, shaped, and used. All of us change the built environment and participate in its maintenance and design – even if the individual interest groups' motivation and awareness of the implementation of Baukultur differ. The potential for Baukultur is as broad as the field of stakeholders. The following recommendations for action from the Federal Foundation of Baukultur are aimed at remedying deficits, but above all making better use of recognised potential.

General Recommendations for Action

New Approach to Planning and Baukultur

- **Organise Administrations and Project Structures Interdepartmentally**
The improvement of (public) planning culture requires a competent and efficient project and administration structure, qualified personnel and organisational development, and sufficient resources/staffing. Through the development of project teams with competent project managers, an integrated planning is enabled in which the interests of many departments are combined. This is the only way building and redevelopment measures can emerge that fulfil not only narrow, functional criteria, but also represent added value for our built environment.
- **Establish “Phase Zero” and Strengthen Basic Evaluation in the Planning Process**
The introduction of “Phase Zero” before the start of planning serves to clarify the building project and ranges from the preliminary studies to the involvement of the public based on the initial planning scenarios. Similarly, the basic evaluation in the planning process (Phase 1 of HOAI) should include in the future an analysis of the project environment for identifying and defining the project participants, as well as establishing clear responsibility structures in the process. This makes it possible to avoid subsequent errors and their associated cost increases.

→ **Implement Design Competitions for Planning Services and Building Projects**

Planning competitions contribute to the quality assurance and value enhancement of building projects. Architectural and urban development quality raises the sustainability and the value of the built environment. Further development of competition processes should improve manageability and efficacy. In this regard, the type of competition and the accessibility – also for smaller and/or new offices – should be kept in mind.

→ **More Intensive Reflection of Planning Processes as “Phase Ten” for Quality Assurance**

A “Phase Ten” – “commissioning” of the building project – leads to important insights and possible corrections of deficiencies in the process. By using a “Phase Ten,” weaknesses can be improved after the completion of the building project, where necessary, and avoided in future planning. Reflections conducted at regular intervals measure the enduring success of the project and have a long-term effect.

Role Model Function

→ **Align Public and Private Building Projects Creatively and Functionally Forward Looking**

All participants in the building process have the task of being a role model. Public sector building projects and private building projects that shape the cityscape should fulfil their role model function in the design of decision-making processes and valuable outcomes, as well as their exhibition and publication. This includes the federal government’s art-in-architecture programme, which makes Germany’s commitment to arts and culture visible to the outside world. In addition, the public sector – here above all the federal government – should develop and test structural solutions for future demands, for example, for living and working, that are sustainable, innovative, and of high design quality and fulfil their social role.

→ **Conduct Integrated Planning for Transport Construction Projects with a Stronger Consideration of Baukultur and Design Issues**

In coming years, much will be invested in the refurbishment and renovation of our infrastructure network. Only through joint planning by the federal, state, and municipal governments can current and future needs, as well as Baukultur and design issues, be adequately planned and considered in order to avoid planning mistakes.

→ **Develop High Design and Process Requirements, Even in Civil Engineering**

The federal government and public sector are developers of many engineering structures – such as roads, bridges, and power and pumping stations. They shape our built environment and should therefore not be aligned solely to functional criteria. Well designed, they can make a positive contribution to the quality of public space and thus represent added value.

→ **Resolve the Large Spatial and Structural Consequences of the Energy Transition through Design**

Due to the energy transition, large sums of money will be invested in building and renovation measures in the coming years and decades. Wind turbines, electric mobility stations, solar roofs, and power lines are just a few examples. Design matters should also be included in the planning, because new building measures shape the built environment for future generations. Therefore, visual appearances for the renovation and the further development of the existing stock have to be sought that are compatible to the city and landscape.

Promotion and Communication of Baukultur

→ **Preservation and Maintenance of the Baukultur Heritage**

The public and private sectors are owners of many monuments and other facilities and legacies worthy of protection. It is important to preserve them for future generations and to communicate their value to the public and make them accessible. Here, the public sector serves as a role model for other owners in dealing with cultural heritage.

→ **Strengthen Locations by Identifying, Promoting, and Communicating the National or Regional Identity**

Building and renovation measures should be just as consistent with national or regional identity as the design of public space. The communication of the building activities and Baukultur identity can, for example, be promoted through exhibitions, city walks, and city models.

→ **Include Baukultur Criteria in Commissioning and Land Allocation Processes**

Through the further development of the VOF procedure, with respect to awarding based not only on financial criteria, the possibility of including Baukultur criteria will be strengthened in public building projects. Also, the sale of real estate – for example, by the Bundesanstalt für Immobilienaufgaben (BImA, Federal Institute for Real Estate), state real estate companies, or other public landowners – is an important management tool for higher Baukultur quality in Germany. Concept procedures oriented to quality criteria should regularly replace highest bidder procedures.

→ **Award Prizes and Plaques to Motivate Private and Public Developers**

The awarding of prizes or plaques for the support and announcement of high-quality Baukultur buildings motivates private developers in their commitment. Since private building projects significantly help shape public space, this should be a concern for the public sector as potential sponsors of prize procedures. Prize procedures improve the communication culture between developers and the professions involved in the construction.

Recommendations for Action to Individual Stakeholders

The Public Sector: The Federal Government

→ More Consideration of Baukultur Criteria in Funding Instruments, such as Urban Development Promotion

Through its funding instruments, the federal government allows municipalities key financial leeway for the implementation of pending measures, which is why they should continue and expand them. Sophisticated buildings can emerge if the instruments are tied to appropriate conditions. To that end, the federal government should specify building policy objectives and measures and present them in an overall concept.

Experimental Clause as Component of Funding Programmes to Support Municipalities in Baukultur Matters

Good planning and building regularly needs supporting research and development. Experimental clauses can also cause greater creative freedom. This promotes innovative and forward-looking, qualitatively sustainable solutions. An effective subsidy rate should be provided for exemplary projects that are transferable nationwide.

→ Recognition of Baukultur's Charitable/Non-Profit Status

Baukultur contributes significantly to the quality of our built environment and thus the well-being of everyone. Therefore, all stakeholders who commit to volunteering for Baukultur matters should be supported by the federal government. The recognition of the charitable/non-profit status should be examined in the federal tax regulation.

The Public Sector: States

→ Care of Baukultur Heritage

As part of the cultural sovereignty of the states, they have a special responsibility for Germany's building and memorial culture. They should fulfil this responsibility through the establishment of memorial advisory councils and other instruments. A nationwide exchange on the situation of Baukultur heritage in the respective states should be intensified.

→ Promote and Improve Baukultur Education

Essential cultural values are taught in school education. This should also include sensitisation to and perception of the built environment. Individual actions or project weeks in cooperation with chambers and professional associations contribute to this, as well as the establishment of a Baukultur pedagogy as part of the general curriculum.

→ **Promote and Improve Baukultur Training of Everyone Involved in the Building Process**

Many professions contribute to the quality of our built environment. Therefore, knowledge about Baukultur issues and a basic understanding of integrated planning should already be taught during training. It is the responsibility of universities in technical, artistic, and real estate courses of study to commit to Baukultur education and advanced training. In addition, programmes offered by the universities for broad sections of the population (“People’s University”) should be strengthened.

The Public Sector: Municipalities

→ **Strengthen Cooperation with Local Stakeholders**

The design of public space and the implementation of building or renovation projects that impact the cityscape not only influence the general public, but also local stakeholders. This can be private initiatives, local community groups, or other interest groups. Their involvement helps in the communication of measures, as well as the stronger identification with a newly created living space. Here, contemporary forms of cooperative collaboration between private and public stakeholders are demanded.

→ **Develop and Establish Communication and Participation Offers on a Project- and User-related Basis**

The public’s early involvement through information and participation in common goal-setting for (municipal) building projects not only reduces later protests, resistance, and construction delays, it also strengthens the quality of the results along with acceptance and identification with the project, and thus commitment and personal responsibility for the built environment. Urban social demands and particular interests can be integrated in the planning process in a timely manner.

→ **Strengthen the Neighbourhood-related Planning Level and the Social Space**

The neighbourhood-related planning level and an effective neighbourhood management enable a Baukultur strengthening of common areas. Infrastructure planning, energy refurbishment, and other measures can thus be adapted to the local needs and conditions. Neighbourhood-related requirements can be used in the development or sale of municipal land to promote the quality of everyday structures and public space.

→ **Establish Design Advisory Councils to Ensure Baukultur Quality**

Design advisory councils are suitable for aligning planning and selection processes in building and renovation measures with regard to design quality. The advisory councils’ public meetings contribute to transparency and communication of arguments and results. Also, mobile, temporary, or interdisciplinary design advisory councils can be used as needed.

Private Developers, Housing, and Real Estate Market

→ **Keep in Mind “Preserving Value through Baukultur” during Refurbishment, Renovation, and New Building**

The “added value through Baukultur” is reflected in higher user satisfaction. It also has a positive effect on the lifecycle costs and the market value of real estate. Necessary for this is the long-term perspective of the owner-occupants or property owners. It should be preferred in all development, design, and building projects to the short-term view of return-oriented project developments.

→ **Baukultur as a Model of Corporate Responsibility and Organisation of Competitions in Planning and Building Projects**

A commitment to entrepreneurial role models with regard to Baukultur shapes and motivates employees and is suitable for conveying to the outside world. It complies with the required social responsibility through ownership stated in the Basic Law. Thereby, competitions benefit quality assurance and the appreciation value of building projects and helps towards better communication and perception of the company. Architectural and urban development quality increases sustainability and secures Baukultur values.

Chambers and Associations

→ **Formulation of a Baukultur Model – On-site Baukultur Discussion**

The formulation, publication, and active communication of Baukultur guidelines for the positioning of the related professions is an important stimulus for members of chambers and associations. They form the basis for cooperation models, along with other professional groups or Baukultur stakeholders. The implementation of these claims through a Baukultur discussion on-site should be a result of this process. In every major city, there should be a Baukultur forum supported by chambers and/or associations as a dialogue offer.

→ **Educate and Provide Consultants and Specialists**

The professions related to Baukultur have special knowledge that they should make available to developers and users. In specific cases, the preservation of monuments, cityscapes, buildings, as well as building consulting often requires on-hand specialised knowledge. For this purpose, the training of special advisers in cooperation with chambers, states, and municipalities should be strengthened.

→ **Initiation and Participation in the Development of Guidelines for Good Planning Practice**

The reality in tenders for planning services and design contests is the object of many professional discussions. Here, it is useful to process experiences on a practice-related basis and to compile or further develop guidelines for future planning processes.

→ **Expand Cooperation in Baukultur Education and Communication**

Due to their federal structure, professional chambers and associations also have the opportunity and task to expand their positive commitment to Baukultur education – such as the format “Architecture in Schools” by the state Chambers of Architects – as much as possible, for example, through cooperation models, project weeks, field trips, and pupil and student prizes.

Federal Foundation of Baukultur and Baukultur Initiatives

→ **Regularly Submit Baukultur Reports in the Future**

After its development phase, the Federal Foundation of Baukultur is presenting with Baukultur Report 2014/2015 its first report on the state of Baukultur in Germany and indicating future fields of action. In this context, perception of the important interface and communication functions with regard to relevant stakeholders and the public points to the Federal Foundation’s enhanced participation and involvement in the public task of integrated planning and building processes of national importance. On this basis, the Federal Foundation should regularly develop a biennial Baukultur Report in the future.

→ **Strengthen the Federal Foundation of Baukultur**

The coalition agreement by the governing parties for the current legislative period provides for strengthening the Federal Foundation of Baukultur as an important partner. In addition to obvious resource issues, participation in the development of quality criteria at the federal level and expansion of a nationwide presence – for example, through “Showcase of Baukultur” in cooperation with local partners – are to be discussed in particular.

→ **Extend the Network of Baukultur Initiatives**

Committed and very effective Baukultur initiatives exist to some extent in states, cities, and municipalities. Due to different designs, structures, and connections, a systematic exchange is only available to some degree. Precisely because of the heterogeneity, the creation of a national and European-wide network makes sense. Here, the Federal Foundation and its Friends’ Association can be even more active in the future, especially in non-urban areas.

Appendix

- 121 Project Profiles
- 126 Sources and Literature
- 130 Picture Credits
- 131 Acknowledgements

Project Profiles

Buchheimer Weg, Köln (P. 31)

The Second Life of a Residential Estate from the 1950s

Location: 51107 Köln; Buchheimer Weg and Grevenstraße

Type of Measures: Demolition and new building

Developer: GAG Immobilien AG, Köln

Urban Planning and Architecture: ASTOC Architects and Planners, Köln

Landscape Architecture: Büro für urbane Gestalt, Johannes Böttger Landschaftsarchitekten, Köln

Structural Planning: AWD Ingenieure, Köln

Tendering, Construction Management: meuter-architekturbüro, Köln

Chronology:

- 2005 Competition with Multiple Commissions (1st Prize ASTOC)
- 2005–2010: Planning
- 2007–2009: Realisation BP1
- 2008–2011: Realisation BP2
- 2009–2012: Realisation BP3

Method: A sensitive relocation management by GAG Immobilien AG ensured that tenants who had previously lived here did not have to find a new home.

Participation Process: Collaboration with the tenants' council in the design and construction process. Numerous information events in the tenants' council.

Costs:

- Total Costs (gross in EUR): 27,756,000 (CG 200 – 300) for BP1 and BP2
- Building Costs (gross in EUR/m²HNF): 1,198.66 (CG 300 – 400) for BP1 and BP2

Development Funds: All apartments are publicly funded.

Size:

- 18 Buildings / 434 Apartments (42 m² – 95 m²)
- GFA overall: 51,600 m²
- FSI: BP1 1.2; BP2 1.4; BP3 1.3

Uses: Day-care centre, group home for dementia patients, residential home for people with disabilities, group room, 3 commercial units (tenant café, LOGO e. V. [educational support], Veedel e. V.)

Energy:

- KfW 60 requirements are met.
- Primary Energy Consumption (in kWh/(m²a)): 38.97
- Spec. Transmission Heat Loss (in W/m²K): 0.44

Features: All apartments are barrier-free, partly equipped for the disabled, and publicly funded, whereby the average rent is 5.10 EUR (cold) per square metre. With an increase in the gross floor area by more than 70%, the character of settlement was maintained without its previous problems.

Climate Protection Concept Renewable Wilhelmsburg, Hamburg (P. 42)

Technical Innovations for Energy Transition at the Neighbourhood Level

Location: 20095 Hamburg; Hamburg-Wilhelmsburg, -Veddel, and the Harburg Inland Port

Type of Measures: Optimised building services, renovation of existing buildings, regional and local network systems, expansion of renewable energies

Basis: Energy Atlas – Climate Protection Concept Renewable Wilhelmsburg

Editor: International Building Exhibition IBA Hamburg GmbH

Project Coordinators Climate Protection Concept: Simona Weisleder and Karsten Wessel

Contributors Climate Protection Concept: Julia Brockmann, Caroline König, Jan Gerbitz, Katharina Jacob

Cooperation: IBA Advisory Panel Climate and Energy:

- Prof. Peter Droege (University of Liechtenstein and Chair of the World Council for Renewable Energy, Australia)
 - Dr. Harry Lehmann (Head of Department at the Federal Environment Agency, Dessau)
 - Prof. Irene Peters (HafenCity University/Hamburg)
 - Prof. Manfred Hegger (Technical University, Darmstadt)
 - Stefan Schurig (Director Climate Energy, World Future Council, Hamburg)
 - Matthias Schuler (Managing Director Transsolar, Stuttgart and Lecturer at Harvard University, USA)
- Study:** "Energetische Optimierung des Modellraumes IBA-Hamburg" by: EKP Energie-Klima-Plan GmbH (Prof. Dr.-Ing. Dieter D. Genske, Dipl.-Geogr. Ariane Ruff) / FH Nordhausen (Prof. Dr.-Ing. Dieter D. Genske, Dipl.-Ing. (FH) Thomas Jödecke) / Ingenieurbüro Henning-Jacob (Dipl.-Ing. (FH) Jana Henning-Jacob).

Chronology:

- 2007: Commencement of work on the guiding theme "Cities and Climate Change"
- 2009–2010: Study "Energetische Optimierung des Modellraumes IBA-Hamburg" and discussion
- 2010: Publication of the climate protection concept Renewable Wilhelmsburg with the Energy Atlas
- 2010–2013: Implementation of projects in the context of climate protection concept Renewable Wilhelmsburg on the basis of competitions and tendering procedures, including Energy Bunker, Energy Hill, Energy Network, Smart Material Houses, etc.
- 2013: Completion and presentation of the IBA building and energy projects, discussion of results

Participation Process:

- Idea generation, concept development, and discussion in the context of IBA laboratories, IBA forums and special events (including: IBA LAB 2008. Architecture and Climate Change / IBA LAB 2008. Energy & Climate / IBA FORUM 2008: Metropolis: Resources / IBA LAB 2010: Energy Atlas / IBA FORUM 2013: IBA FINALE / Climate Protection Concept Renewable Wilhelmsburg – Review, Outlook, Comparison 2013)
- Partnerships with local organisations and associations within the IBA Partnership (about 150 members) and the thematic working groups "Construction and Housing" and "Climate and Energy"
- Competitions and workshops on individual topics and projects
- Project dialogues on individual projects
- Involvement in national research programmes ("EnEff: Stadt – IBA Hamburg" together with TU

Braunschweig (Institute for Building Services and Energy Design), Energy Research Center of Niedersachsen, HafenCity University (HCU Hamburg)

- Involvement in international projects TRANSFORM (7th framework programme for research), INFRAPLAN (D-A-CH-Project), Build with Care (Interreg IV B NSR), Co2olBricks (Interreg IV B BSR)

- Ongoing press and public relations

Subsidies:

- Support of the Energy Atlas with funds from the Hamburg Climate Protection Concept and the EU interregional project, Build with Care.
- Support of individual project, among others with fund from the Hamburg Climate Protection Concept and ERDF funds from the EU.

Uses: Residential, commercial, retail, services, public use

Energy: Coverage of local energy demand for the residential, commercial, retail, and service sectors with 100% locally generated renewable electricity by 2030, and up to 85% with locally generated renewable heat by 2050; realisation of a nearly climate-neutral urban neighbourhood by 2050

Use of the Following Technologies: Photovoltaics, wind energy, biogas cogeneration, solar thermal energy, waste heat from industrial plants, wood chips, heat pumps, deep geothermal energy, PCM technology, and many others

Schottenhöfe, Erfurt (P. 47)

Neighbourhood Vitalisation and Property-overlapping Energy Concept

Location: 99084 Erfurt; Schottengasse, Schottenstraße, and Gotthardtstraße

Type of Measures: Refurbishment, new building, renovation, addition

Developer: CULT Bauen & Wohnen GmbH, Erfurt

Owner: Owners' Association "Schottenhöfe", Erfurt

Architecture: Osterwold*Schmidt EXPiANDER Architekten BDA, Weimar

Landscape Architecture: plandrei Landschaftsarchitektur, Erfurt

Structural Planning: Hennicke + Dr. Kusch, Weimar

Building Services: manes – electro GmbH, Erfurt;

Steffen Beck, Wandersleben; Ingenieurbüro für Wärme-, und Haustechnik IBP, Erfurt

Light Planning: Die Lichtplaner, Limburg

Chronology:

- Since 1990: Ongoing excessive property indebtedness
- 2008: Acquisition of property with building licence / recommendation of the Erfurt design advisory council for building concept and architectural design through peer review processes
- 2009: Peer review process with three architecture offices / 1st Prize in peer review process (Osterwold*Schmidt Architekten)
- 2009: Project-related development plan / building plan through the City of Erfurt
- 2010–2012: Realisation
- 2012: Completion

Size: Property 3,316 m², GFA buildings 8.48 m², NFA buildings 6,765 m², Living area ca. 5,100 m² (incl.)

vacation apartments), ca. 60% new building, 40% old building, 54 apartments and utilisation storage, FSI: 0.48 (overbuilt) / 0.69 (incl. supports)

Uses: Housing, vacation apartments, business, underground car park

Energy:

- Primary energy demand (in kWh/(m²a): 43–54
- Spec. transmission heat loss (in W/m²K): 0.41–0.53
- Energy demand (in kWh/(m²a): 59–75

Features: Inter-neighbourhood consideration in urban development concept, in architectural design, and in the energy network of old buildings and the new construction. The energy compensation in the new building allowed the preservation of the distinctive old buildings and their impact on the cityscape, without their otherwise common heat insulation wrapping.

Stadtregal, Ulm (P. 57)

New Mixed Usage on an Old Industrial Site

Location: 89077 Ulm; Magirus-Deutz-Straße

Type of Measures: Revitalisation, refurbishment, renovation

Developer: Projektentwicklungsgesellschaft Ulm mbH

Architecture: Rapp Architekten, Ulm (BP1–5) in a working group with Braunger Wörtz Architekten, Ulm (BP1–2)

Landscape Architecture: Manfred Rauh, Schmid-Rauh Landschaftsarchitekten, Neu Ulm

Construction Management: Alwin Grünfelder, Ulm Consult, Ulm

Structural Planning: Martin Haide, Ingenieurbüro Haide, Langenau

Building Services MEP: Prof. Jürgen Schreiber, Schreiber Ingenieure, Ulm

Building Services Electric: Ott Ingenieure, Langenau

Building Physics: Sören Kiessling von Holtum, Ingenieurbüro Kiessling, Ulm

Fire Protection: um+t, Ulm

Chronology:

- from 2005: Concept planning
- 2007–2013: Completion BP1–5

Process Quality: Use concepts and plans were developed and fixed with buyers and users. To coordinate between users and the planning team, the developer hired an additional person, who was responsible for coordinating the expansion.

Costs:

- Total Costs (gross in EUR): 46,000,000 (CG 200 – 700)
- Building Costs (gross in EUR/m²): 1,250 (CG 300 – 400)

Subsidies: The building is located in the redevelopment area "Magirus II". The area covers about 50,000 m², and was included in the federal-cities urban development programme "Stadtumbau West" (Urban Redevelopment West) in 2006.

Total Funding: 2,500,000 EUR

Size:

- Existing building with a length of 250 metres, a depth of 30 metres, and a height of 20 metres (4 storeys).
- Total Floor Space ca. 20,000 m²
- 115 Units – of which 69 residential lofts

Uses: Housing, offices, commercial, doctors' offices

Energy: Connection to the Ulm district heating biomass power plant

Features: Parking on the 2nd floor is possible by a car lift

Weltquartier, Hamburg (P. 64)

Refurbishment in a Multicultural Neighbourhood

Location: 21107 Hamburg-Wilhelmsburg; Rotenhäuser Straße / Weimarer Straße / Veringstraße / Neuhöfer Straße

Type of Measures: Renovation, new building, modernisation

Developer: SAGA Siedlungs-Aktiengesellschaft Hamburg, Hamburg; GMH Gebäudemanagement Hamburg GmbH

Architecture: kfs Krause feyerabend Sippel Architekten, Lübeck (1st Prize); Knerer+Lang Architekten, Dresden/Munich (2nd Prize)

Landscape Planning: Andresen Landschaftsarchitektur, Lübeck (1st Prize)

Project Coordination: René Reckschwardt, IBA Hamburg GmbH

Planning Partners: Behörde für Stadtentwicklung und Umwelt (BSU) / Bezirk Hamburg-Mitte, / HAMBURG ENERGIE GmbH / Landesbetrieb für Immobilienmanagement und Grundvermögen (LIG)

Others Involved in the Process:

Landscape Architecture: Breimann + Bruun Landschaftsarchitekten, Hamburg (Welt-Gewerbehof); Project Control, Project Management: WSP, München; Competition (Management, Implementation): Claussen + Seggelke, Hamburg (Weltquartier) / BPW, Bremen (Welt-Gewerbehof)

Participation Process: Superurban, Hamburg / Pro Quartier, Hamburg

Architecture: Gerber Architekten, Hamburg / Dortmund (purchase); Petersen Pörksen Partner Architekten + Stadtplaner, Lübeck (purchase); Kunst + Herbert Architekten, Hamburg (purchase); Dalpiaz + Giannetti Architekten, Hamburg (1st Prize Welt-Gewerbehof)

Chronology:

- 2007: Intercultural planning workshop Weltquartier
- 2008: Urban development ideas and realisation competition Weltquartier
- 2009: Construction start Weltquartier
- 2010: Peer review process Welt-Gewerbehof / Completion Weltquartier Pavilion and Weimarer Platz
- 2011: Completion BP2a and 2b
- 2012: Completion BP3a and 3b, Construction start Welt-Gewerbehof
- 2013: Completion BP5–8 / Welt-Gewerbehof
- 2014: Completion BP4 / planned: BP9
- 2015 Planned: Completion BP10

Process: Urban development ideas and realisation competition Weltquartier (2008); peer review process Welt-Gewerbehof (2010)

Participation Process: Tenants' dialogues / Multilingual survey by "local historians" / intercultural planning workshop / project dialogues Weltquartier, Welt-Gewerbehof / trilingual building and tenants' letters / workshops (focus areas: children's playgrounds, garden island, open space design)

Costs: Total investment volume: ca. 103,000,000 EUR

Subsidies:

- Weltquartier: Stadtumbau West / All apartments are publicly funded
- Welt-Gewerbehof: European Regional Development Fund (ERDF) / European Social Fund / Rahmenprogramm Integrierte Stadtteilentwicklung (RISE) / 5 or 6 modules are publicly funded, one privately financed (to explore the market in Wilhelmsburg)

Size:

- 13 new constructions (274 apts.), 12 renovations and modernisations (469 apts.)

- GFA before: ca. 28,000 m² / GFA after: ca. 45,000 m²
- Storeys: III, IV, V

Uses: 743 apartments, 35 commercial units with 2,400 m² GFA, 1 restaurant area, 2 stores

Energy: Regenerative heat supply from the neighbouring Energy Bunker / all new buildings are constructed to Passive House standards.

- Primary Energy Demand (in kWh/(m²a)): 9 (renovations)
- Special Transmission Heat Loss (in W/m²K): 0.43 (renovations)
- Energy Demand (in kWh/(m²a)): 53 (renovations)

Features: Before: 1,700 people, 31 countries / after (2015): ca. 2,000 residents. About 40% of the original tenants live in the Weltquartier again after the renovation, 84% remained on the Elbe Island Wilhelmsburg with 55,000 inhabitants.

Oderberger Straße 56, Berlin (P. 69)

Urban Mix at the Building Level

Location: 10435 Berlin; Oderberger Straße 56

Type of Measure: New building

Developer: Baugruppe GbR Oderberger Straße 56

Architecture: BARarchitekten, Antje Buchholz, Jack Burnett-Stuart, Michael von Matuschka, Jürgen Patzak-Poor

Structural Planning: ifb thal + huber, Berlin

Building Services: DELTA-i GmbH, Berlin Michael Morosoff

Chronology:

- 2007–2008: Planning
- 2010: Completion

Costs:

- Total Costs (gross in EUR): 2,056,000 (CG 200 – 700)
- Building Costs (gross in EUR/m²): 1,650 (CG 300 – 400)

Size: Plot area 315 m², 7.5 storeys, 19 units, 4 large apartments between 78 and 83 m² each combinable with a small apartment between 27 and 45 m², and 1 apartment 76 m², studios between 31 and 45 m², restaurant 51 m², store/workshop 43 m², gallery space 6 m², workshop 28 m², guest penthouse apartment 18 m², courtyard 158 m², shared roof garden 36 m², FSI: 4.0

Uses: 5 apartments, 5 studios, restaurant, workshop, gallery, courtyard, roof garden

Energy: Pellet heating / with mineral wool insulated, non-structural exterior wood walls / triple glazing

- Primary Energy Demand (in kWh/(m²a)): 29.5
- Spec. Transmission Heat Loss (in W/m²K): 0.39
- Energy Demand (in kWh/(m²a)): 53.3

Features: Modified unit financing. The building falls below the required level of the energy saving ordinance (EnEV) for primary energy demand by about 60%.

Living at Innsbrucker Ring, München (P. 72)

From Noisy Row Construction to Housing with Communal Interior Courtyards

Location: 81671 München-Ramersdorf; Zornedinger Straße 12–38

Type of Measures: Renovation, refurbishment, new building, addition of another storey

Developer: GWG Städtische Wohnungsgesellschaft München GmbH

Architecture: Felix + Jonas Architekten GmbH, München

Structural Planning: Sues Staller Schmitt Ingenieure GmbH, Gräfelfing
Landscape Architecture: Stefanie Jühling Landschaftsarchitektin BDLA DWB, München
Construction Management: Bittenbinder + Kagerer, München

Sound Insulation, Building Physics: Ingenieure Süd GmbH, München

Building Services: Planungsgruppe Haustechnik, München

Collaboration: The project is located in a redevelopment area of the state capital Munich. All of the city's relevant departments and the municipal authorities – such as the Office for Housing and Migration and the district committee – were included in the planning.

Chronology:

- From 2007: Planning
- 2012: Completion

Participation Process: The tenants' concerns were considered early on by involving them in the decision-making processes. Planning was communicated to residents through workshops and information sessions. The housing communities were to be maintained according to tenants' wishes. 2/3 of the tenants remained in the apartments during the renovation and new construction measures. The building and flat-sharing communities could be maintained.

Costs:

- Total Costs (gross in EUR): 14,467,650 (CG 200 – 700)
- Building Costs (gross in EUR): 13,038,490 (CG 300 – 400)

Subsidies: Social Housing Promotion / Federal-State Urban Development / Grant programme "Wohnen am Ring" from the Capital City of Munich

Size: Three four-storey building rows (existing building stock) (each about 75m in length), between them three new five-storey building complexes, existing building stock (before the measures) 112 apts. with 256 inhabitants / New (following measures) 148 apts. with 398 inhabitants, 15 apts. new construction, 25 apts. increase, 24 apts. renovation, 84 apts. refurbishment 9,014 m² living area / 10,049 m² property area / 4,983 m² base area / 8,360 m² green area (lawn and planting areas) / FSI 1.29

Uses: Housing, private open areas, communal garden areas, district meeting place

Energy: Heating energy surplus

- Energy Demand (in kWh/(m²a)): 72.94
- Primary Energy Demand (in kWh/(m²a)): 80.11
- Spec. Transmission Heat Loss (in W/m²K): 0.5

Features: The Middle Ring is Munich's main thoroughfare, with up to 100,000 vehicles daily. Closing of the gap of the existing residential complex through the arrangement of new 5-storey buildings that function as a "noise barrier" to create a living environment relieved of noise.

Park at Gleisdreieck, Berlin (P. 78)

Balance between Nature Conservation and Recreation

Location: 10963 Berlin; Kreuzberg

Type of Measures: Renovation, brownfield revitalisation

Developer: Senate Department for Urban Development and the Environment, Berlin, represented by the Grün Berlin Stiftung

Project Control, Project Management: Grün Berlin GmbH

Overall Planning and Design: Atelier Loidl Landschaftsarchitekten

Construction Management: Breimann Bruun Simons Landscape Engineering GmbH, in cooperation with Atelier Loidl

Project Advisory Group: (PAG) Representatives: citizens and residents / Senate Department for Urban Development and the Environment / Ateliers Loidl / Grün Berlin GmbH / Schöneberg Nord, Magdeburger Platz, Tiergarten Süd, the districts Friedrichshain-Kreuzberg, Tempelhof-Schöneberg, and Mitte neighbourhood councils.

Departmental Planning Water Engineering: Müller-Kalchreuth

Electrical Engineering: Ingo Acker

Environmental Consulting: Dr. Barbara Markstein Experts' Report on Trees: Flechner & Brodt

Ground Surveys: Geoversal Ingenieurgesellschaft mbH

Surveying Technology: Zech und Ruth

Health and Safety Coordination: INVO Ingenieurbüro Vogt

Execution of Site Clearance: BTB Erdbau und Abbruch GmbH; RWG / Baustoffrecycling GmbH
Landscaping: Otto Kittel GmbH & Co. KG, Eckhard Garbe GmbH, Fehmer GmbH

Water Installations: Combé Anlagenbau GmbH, TRP Bau GmbH

Chronology:

- 2005: Framework contract for the urban development of Gleisdreieck (by Senate Department for Urban Development and the Environment, Bezirk Friedrichshain-Kreuzberg, Vivico Real Estate GmbH).
- 2006: After intensive, multilevel citizen participation – decision for an international landscape design ideas and realisation competition
- 2011: East Park opening / 2013 West Park opening / 2014 Bottleneck Park opening

Financing and Processes: The urban development framework agreement from 2005 governs the use of an approximately 58.8-hectare area of the former Potsdamer and Anhalter freight depot (Gleisdreieck), which is composed of various individual surfaces. Planning: public park and inner-city development on four construction sites. With this, the transition between the Governing Mayor of Berlin, Deutsche Bahn and the Federal Railroad Fund is implemented. Framework agreement: Regulations on the construction sites, principles of financing for individual utility areas for the park, as well as the guidelines for land acquisition and for decommissioning by the State of Berlin. Based on the urban development framework contract, the State of Berlin initiated the development plan procedure VI-140. The largest section was financed by compensation and substitution funds from the projects Potsdamer Platz and Leipziger Platz; the regulation for this was made in the urban development contract "on the implementation and financing of compensatory measures for intervention in the performance of the ecosystem and the landscape through construction projects in the area of Potsdamer/Leipziger Platz".

Citizen Participation and Information: Citizens' survey (1,600 households in the vicinity), online dialogues, planning forums (five public information and discussion events between 2006 and 2010), regular meetings for preparation and follow-up of a project advisory group (PAG)

Costs: Total Costs (net in EUR): ca. 20,000,000
East Park: 9.5 MM EUR / **West Park:** 8.5 MM EUR / **Bottle Neck:** 2 MM EUR

Size: ca. 27 hectare total area (16 hectare East Park, 9 hectare West Park, 2 hectare Bottleneck Park)

Uses: Sports and playgrounds, lawns, biking and walking paths, gardens

Features: Pilot projects: Nature experience areas for children, gardens in the garden, intercultural rose fragrance garden, environment in the park, the "Bottleneck"

Repair of an Automotive City, Pforzheim (P. 84)

City Centre Upgrade through Integrated Transport Planning

Location: 75172/75175 Pforzheim; Schlossberg and Innenstadt

Type of Measure: Urban redevelopment, road decommissioning

Developer: City of Pforzheim

Transport Planning: Professor Hartmut Topp (topp. plan: Stadt.Verkehr.Moderation), Kaiserlautern and Planungsbüro R+T, Darmstadt

City Planning: RKW Düsseldorf and Kohl Architekten, Berlin

Project Management: Amt für Stadtplanung, Liegenschaften und Vermessung

Participating City Departments: Grünflächen- und Tiefbauamt, Untere Denkmalschutzbehörde, Personal- und Organisationsamt, Eigenbetrieb Stadtentwässerung Pforzheim, Stadtwerke Pforzheim, Wirtschaft- und Stadtmarketing Pforzheim.

Private Project Partner: Innenstadtentwicklungsgesellschaft

Experts for:

- Model/Utilisation Concept: Van Dongen Koschuch/Out Of Office, Amsterdam
- Commerce: VEND Consulting, Nürnberg
- Future Workshop: Frau Prof. Dr. Stein, Frankfurt; workshop mit Owners: Roland Strunk, Frankfurt; idea-finding process: Markus Mettler, Brainstore, Biel/CH

Other Partners/Involved Parties: Owners, service providers, trade and gastronomy in the city centre, citizens, mayors from the surrounding areas, as well as urban design associations and initiatives, and the Pforzheim City Council

Chronology:

- 2012: Urban planning workshop process City Centre Development East with five planning offices
- 2013/14: Preparation of different concepts for the city centre and broad citizen participation
- 2014: Resolution of the framework plan City Centre Development East in the city council
- planned for 2015: Selection of investors
- Completion not before 2016: The configuration depends on the urban planning results in the course of the planned investor selection process.

Procedure/Process: The City of Pforzheim Master Plan process (2011/12) for the development of urban development objectives in different topic areas, as well as the City Centre Development East project were the driving forces for the overall development of the city centre. The project is thus embedded in an overriding city centre concept. The City of Pforzheim has commissioned several plans: a model and utilisation concept city centre, a traffic concept city centre, a retail concept city centre, as well as the framework plan City Centre Development East. In addition, plans are ongoing for the design upgrade of the city centre (design of private buildings and public space).

Participation Process: Citizens' information event and first future workshop (April/May 2013) / creative participation process (Sept. to Nov. 2013) with brainstorming, idea evaluation, and concrete project ideas for the Pforzheim city centre – "How Pforzheim Becomes Irresistible" / interviews, rounds of talks and workshops with owners, service providers, retail, and hospitality in the city centre, mayors from surrounding areas, as well as citizens and groups (2nd half of 2013).

Costs: The costs of the operation cannot yet be estimated. They depend in particular on the urban planning framework conditions, and the duties to be transferred later to an investor.

Subsidies: Currently, the city is conducting preparatory studies for inclusion in a redevelopment area (if applicable, federal and state funding programme).

Size: The project area between the central station and Enz, as well as the Marktplatz and Deimlingstrasse comprises a total of approximately 9 ha. The Schlossberg slip road is located in its centre.

Uses: Housing beneath the Schlosskirche / mixed neighbourhood with retail, services, administration, public institutions at the Rathausshof on the southern edge of the city

Flood Protection and Design of Main Riverbank, Würzburg (P. 87)

Combination of Technical Solutions and Design Requirements

Location: 97070 Würzburg; Upper Main Quay

Type of Measure: Urban redevelopment, flood protection

Developer: Free State of Bavaria, represented by the Wasserwirtschaftsamt Würzburg in cooperation with the City of Würzburg

Architecture and Outdoor Installations: Klinkott Architekten, Karlsruhe

Supporting Structure and Civil Engineering: Dreier Ingenieure, Würzburg

Transport and Outdoor Installations: Ingenieurbüro Maier, Würzburg

Chronology:

- 1998/99: Urban development competition (1st Prize Klinkott)
- 2000–2006: Planning
- 2005–2012: Realisation
- 2009: Completion BP1 and 2
- 2012: Completion BP3

Participation:

- Several single agreements on individual planning objectives with residents
- Several public information events with residents and citizens
- Regular participation of municipal committees and the city council
- Several sampling appointments with members of the city council for the selection of materials

Costs: Total costs (gross in EUR): ca. 20,000,000

Funding Programme: Financing with the flood protection programme of the Free State of Bavaria / funding through Municipal Transport Financing Act GVFG

Size: ca. 25,000 m² total area, of which

- ca. 9,500 m² river promenade / footpaths
- ca. 900 m² plaza
- ca. 4,100 m² green areas
- ca. 2,800 m² parking areas
- ca. 7,700 m² road space

Uses: Public parks and outdoor installations, restaurants, pier

Features: Coordination of flood protection measures based on individual circumstances and residents' wishes. Integration of flood protection in the cityscape, the historical building structure, and the outdoor installations.

Ludwigsburg Model (P. 95)

Holistic Urban Development Through Dialogue and Networking

Involved Parties: City council, city administration, panels of experts, citizens

Chronology:

- 2003: Idea phase
- 2004: Preparation phase / municipal council closed meeting
- 2004–2008: Administrative office urban development concept
- Since 2004: Urban development concept (UDC) "Opportunities for Ludwigsburg" / department for civic engagement
- 2005: Opinion through interviews / public launch event (ca. 200 people) / dialogue summer (neighbourhood walks, events, youth conference) 1st Future Conference: visions, goals, and project ideas (ca. 128 people)
- 2006: 2nd Future Conference: Pilot Projects, Measures, Networks (ca. 100 people)
- Since 2007: District Development Plans (DDP)
- Since 2008: The cross-sectoral department "Sustainable Urban Development" takes over the management of the implementation process
- 2009: 3rd Future Conference: Balance and Further Work on the UDC (ca. 100 people)
- 2012: 4th Future Conference: Sustainable Urban Development (ca. 250 people)
- Since 2012: Citizen participation platform "meinLB.de"

Procedure: In the UDC, eleven municipal topics are defined: attractive living, education and care, the economy and employment, mobility, coexistence of generations and nations, vibrant city centre, vital districts, energy supply, cultural life, diverse sports activities, green in the city. With the organisation of citywide participation processes (such as the Future Conference), an embedding of citizens' interests in the UDC, as well as participation in the "agenda-setting" and in the definition of fields of action took place. Administrative control occurs through the master plans, which encompass principles and strategic objectives as well as the operational implementation. The concept includes an indicator-based monitoring system.

Process quality: At the start, a preparation team and a management retreat set the course in terms of internal organisation and content. The Urban Development Concept department was established in 2004 for process control. It coordinated the work of the municipal council, the city administration, the panels of experts, and citizens for the master plan until 2008, and was responsible for the successful process. In 2008, the control was then transferred to the cross-sectoral department "Sustainable Urban Development".

Communications/Public Relations: Newsletter and district newspapers as elements of the district development plans (DDPs). Periodic special topics in district papers, MeinLB.de; regularly updated website; display in the arts and cultural centre.

Participation Process:

- Mobilising formats for preparation of future conferences, in order to bring previously under-represented social milieus closer to citywide

urban development issues – e.g., a project week with schoolchildren on urban development issues or a qualitative interview series with the participation of migrants on personal needs and issues of urban development.

- Cooperative dialogue and planning procedures are suitable for use where there are hardened fronts or different objectives for the spatial development: Based on the principle "problems first", identify perspectives and barriers with urban development designs, support group of internal and external experts as well as representatives from the political sphere in the development of possible solutions and the approach to the best solution.

- Instruments used in district development on an ongoing basis include neighbourhood walks and information booths in the context of neighbourhood festivals. Advantages: presence in a non-binding atmosphere on-site, low-threshold forms of participation with a positive cost-benefit ratio – a permanent implementation creates trust.

Subsidies:

- BMBF ZukunftsWerkStadt 153,000 EUR
- Pilot Project National Strategic Plan for an integrated urban development policy 50,000 EUR (50% co-payment by the city) – Multimedia participation within the framework of the Future Conference 2012

Nya Nordiska Expansion, Dannenberg (P. 99)

A Company Expansion in the Historic City Centre

Location: 29451 Dannenberg; An den Ratswiesen

Type of Measures: Extensions, refurbishment

Developer: Nya Nordiska Verwaltungs GmbH, Dannenberg

Architecture: Staab Architekten, Berlin

Competition (Supervision): Bernardy Architekten, Berlin (for Nya Nordiska)

Planning: Alexander Böhme (Project Management), Madina v. Arnim, Marion Rehn, Sabine Zoske, Marcus Ebener, Tobias Steib (Tendering and Award)

Support Structure: ifb frohloff staffa kühl ecker, Berlin (Permit); Peter Martens + Frank Puller Ingenieuresellschaft mbH, Braunschweig (Execution)

Landscape Planning: Levin Monsigny Landschaftsarchitekten GmbH, Berlin

Project Control: Ralf Pohlmann, Waddewitz

Construction Management: Kümper + Schwarze Baubetriebe GmbH, Wolfenbüttel (GU)

Fire Protection: IBB Ing.-Büro, Gert Beilicke, Leipzig
Conveyor Technology: prg Ingenieuresellschaft mbH, Berlin

Light Planning: LKL Licht Kunst Licht AG, Berlin

Chronology:

- 2008: Invited competition (1st Prize)
- 2008–2010: Planning start – Completion
- 2009–2010: Construction period

Costs: Total costs (gross in EUR): 6,500,000 (CG 200 – 700)

Subsidies: ERDF Funds 1,400,000 EUR

Size:

- UA: 3,120 m²
- GFA: 4,100 m²
- GV: 21,800 m³

Uses: Workshops, production areas, pattern departments, administration, shop, training room, central design development

Energy Concept: Below the acceptable maximum values of the annual primary energy demand

according to EnEV 2007 for new buildings by about 20%. Sustainability and profitability through durable façade material.

Features: The basic decision of the developers for an extension at the company location within the historic district also led to an upgrading of the surroundings. The compact merger of divisions on the existing company premises enabled efficient workflows and flexible use of space.

Design Advisory Council, Regensburg (P. 106)

Model for Baukultur Advisory Committees in Germany

Existence: since May 1998

Head of the Office: 1998–2001: Klaus Heilmeyer / since 2002: Tanja Flemmig

Coordination: Johanna Eglmeier

Current Design Council Advisors: Prof. Dr.-Ing. Paul Kahlfeldt, Berlin / Prof. Uta Stock-Gruber, Buch am Erlbach / Prof. Michael Gaenßler, Munich / Prof. Ingrid Burgstaller, Munich / Prof. Víctor López Coteló, Madrid / Architect Elke Delugan-Meissl, Vienna

Cooperation: The office is located in the Planning and Building Department at the Department of Building and works together with various departments of the city government, above all with the City Planning Department and the Office of Archives and Historical Monuments, and the Bavarian State Conservation Office. Consultation with all parties involved in the construction up to detailed arrangements.

Structure: The Design Advisory Council (DAC) was established – with the help of the Regensburg architecture circle, politics, and administration – to promote Baukultur. The role model was the Linz Model. Five, or since 2011, six experts from the field of architecture and urban planning, as well as landscape architecture, have advised both politics and administration on Baukultur issues. The DAC meets five to six times a year. The councils are completely independent, and since they are non-residents have a temporary mandate (max. 4 years), and may not plan or build in Regensburg during their DAC activities.

Procedure: Projects are handled by the design advisory council, if they appear to be influential because of their magnitude and importance for the cityscape. On the meeting day, everyone on-site is introduced by the office. Here, a brief exchange takes place between the city and the advisory council. In the meeting, mainly architects, developers, and advisors talk with each other. For each project, the advisory council prepares a report that is sent to the developers and planners. If a project is not approved by the advisory council, it has to be presented in the process again after revisions. For major projects, the advisory council is involved up to the detailed planning.

Publicity: No later than one week before the meeting, the agenda is publicised via the press and the Internet. The public is generally admitted to the meetings. Representatives of the city council fractions and the local press (regular reporting) participate as audience members. The Regensburg Design Advisory Council has gained nationwide role model function (lectures about the design advisory council in 15 cities – e.g., Bonn, Stuttgart, Dusseldorf, Cottbus, Freiburg, Nuremberg – and participation in discussion forums at various Chambers of Architects, at the DBA, and at the Federal Foundation of

Baukultur). The office has published 3 brochures. Information on the Design Advisory Council at www.regensburg.de

Costs: For the Design Advisory Council meetings, 40,000–65,000 EUR of budgetary funds is required annually.

Scope of Work: From the period May 1998–May 2014, the Design Advisory Council oversaw a total of 307 projects in 85 regular meetings and 24 special appointments.

Of which:

- 164 projects have been completed
- 18 projects are under construction / 45 projects received permits, but are not yet under construction
- 74 projects (currently) not continued, or 20 projects realised with other planners
- 186 projects were treated as resubmissions

Sources and Literature

Introduction

- Crutzen, Prof. Dr. Paul J. in Schwägerl, Christian (2012): *Menschenzeit*, Goldmann-Verlag München.
- Deutscher Bundestag, 14. Wahlperiode, Drucksache 14/8966: Unterrichtung durch die Bundesregierung, Bericht der Bundesregierung – Initiative Architektur und Baukultur, 29.04.2002

Baukultur in Germany – The Starting Point for Cities

- BBSR – Bundesinstitut für Bau-, Stadt- und Raumforschung im Bundesamt für Bauwesen und Raumordnung (BBR) (Ed.) (2013): Bericht zur Lage und Perspektive der Bauwirtschaft 2013. Bonn.
- BMF – Bundesministerium der Finanzen (2014): Bundeshaushalt online. Berlin. URL: <http://www.bundeshaushalt-info.de/startseite/#/2012/soll/ausgaben/einzelplan.html> (Stand 3/2014).
- BMVBS – Bundesministerium für Verkehr, Bau und Stadtentwicklung (Ed.) (2012): Strukturdaten zur Produktion und Beschäftigung im Baugewerbe. Berlin.
- BMWi – Bundesministerium für Wirtschaft und Technologie (Ed.) (2012): Wirtschaftsfaktor Tourismus Deutschland. Berlin.
- (Die) Bundesregierung (2013): Deutschlands Zukunft gestalten. Koalitionsvertrag zwischen CDU, CSU und SPD. 18. Legislaturperiode. URL: <http://www.bundesregierung.de/Content/DE/StatistischeSeiten/Breg/koalitionsvertrag-inhaltsverzeichnis.html> (Accessed 3/2014).
- DAT – Deutsche Automobil Treuhand (Ed.) (2013): DAT-Report 2013 – kfz-betrieb. Ostfildern.
- Destatis – Statistisches Bundesamt (2014): Inlandsproduktsberechnung, Bruttoanlageinvestitionen nach Güterarten. Wiesbaden. URL: <https://www.destatis.de/DE/ZahlenFakten/GesamtwirtschaftUmwelt/VGR/Inlandsprodukt/Tabellen/Bruttoanlageinvest.html> (Accessed 3/2014). own calculations.
- Destatis – Statistisches Bundesamt (2013a): Baugenehmigungen/Baufertigstellungen, Lange Reihen 2012. Wiesbaden.
- Destatis – Statistisches Bundesamt (2013b): Zensus 2011 – Gebäude und Wohnungen, Stand Mai 2013. Wiesbaden.
- Destatis – Statistisches Bundesamt (2013c): Volkswirtschaftliche Gesamtrechnungen – Anlageermögen nach Sektoren, Arbeitsunterlage. Wiesbaden.
- Statistische Ämter des Bundes und der Länder (2014): Gebäude- und Wohnungsbestand in Deutschland – Erste Ergebnisse der Gebäude- und Wohnungszählung 2011. Hannover.
- Technische Universität Dortmund – Grueth, Dietwald, und Anne Hoffmann (2010): Bedeutung von Freiräumen und Grünflächen in deutschen Groß- und Mittelstädten für den Wert von Grundstücken und Immobilien. LLP-report 010. Dortmund. URL: http://www.galk.de/projekte/pr_down/LLP_report_010_final_100318.pdf (Accessed 3/2014).

Stakeholders of Baukultur – Who Takes Care of the Built Environment?

- BAK – Bundesarchitektenkammer (2013): Bundeskammerstatistik. Berlin.
- BBSR – Bundesinstitut für Bau-, Stadt- und Raumforschung im Bundesamt für Bauwesen und Raumordnung (BBR) (Ed.) (2012): Anstieg großer Wohnungstransaktionen in 2012. Bonn.
- BBSR – Bundesinstitut für Bau-, Stadt- und Raumforschung im Bundesamt für Bauwesen und Raumordnung (BBR) (Ed.) (2011a): Wohnungs- und Immobilienmärkte in Deutschland 2011. Bonn.
- BBSR – Bundesinstitut für Bau-, Stadt- und Raumforschung im Bundesamt für Bauwesen und Raumordnung (BBR) (Ed.) (2011b): Wohnungsmärkte im Wandel, Zentrale Ergebnisse der Wohnungsmarktprognose 2025. Bonn.
- BBSR – Bundesinstitut für Bau-, Stadt- und Raumforschung im Bundesamt für Bauwesen und Raumordnung (BBR) (Ed.) (2011c): Transaktionen großer Wohnungsbestände 2011. Bonn.
- BINGK – Bundesingenieurkammer (2012): Ingenieurstatistik. Berlin.
- BMVBS – Bundesministerium für Verkehr, Bau und Stadtentwicklung (Ed.) (2012): Strukturdaten zur Produktion und Beschäftigung im Baugewerbe. Berlin.
- BMVBS – Bundesministerium für Verkehr, Bau und Stadtentwicklung (Ed.) (2009): Bürgermitwirkung im Stadttumbau. Berlin.
- Braum, Michael, und Wilhelm Klauer (Ed.) (2013): *Baukultur Verkehr, Orte – Prozesse – Strategien*. Zürich.
- Braum, Michael (Ed.) (2011): *Baukultur des Öffentlichen. Bauen in der offenen Gesellschaft*. Basel.
- Braum, Michael, und Olaf Bartels (Ed.) (2010): *Wo verkehrt die Baukultur? Fakten, Positionen, Beispiele*. Basel.
- Braum, Michael, und Oliver G. Hamm (Ed.) (2010): *Worauf baut die Bildung? Fakten, Positionen, Beispiele*. Basel.
- Bundesingenieurkammer (1998): *Musterberufsordnung der Bundesingenieurkammer*. O.O. Bundesstiftung Baukultur (2014): *Netzwerk*. Potsdam. URL: <http://www.bundesstiftung-baukultur.de/netzwerk> (Accessed 3/2014).
- Bundesstiftung Baukultur (2013): *Handbuch der Baukultur 2013–2015*. Potsdam.
- Destatis – Statistisches Bundesamt (2013): *Baugenehmigungen/Baufertigstellungen, Lange Reihen 2012*. Wiesbaden.
- Destatis – Statistisches Bundesamt (2012): *Mikrozensus 2011 – Bevölkerung und Erwerbstätigkeit – Beruf, Ausbildung und Arbeitsbedingungen der Erwerbstätigen in Deutschland*. Wiesbaden.
- Deutscher Bundestag (2012): *Grundgesetz für die Bundesrepublik Deutschland vom 23. Mai 1949 (BGBl. S. 1)*, zuletzt geändert durch das Gesetz vom 11. Juli 2012 (BGBl. I S. 1478). Berlin.
- Deutscher Bundestag (2009): Unterrichtung durch die Bundesregierung – Bericht über die Wohnungs- und Immobilienwirtschaft in Deutschland, Drucksache 16/13325. Berlin.

- Difu – Deutsches Institut für Urbanistik (2011): *Stärken- und Schwächenanalyse für das technische Referendariat mit Vorschlägen zum weiteren Vorgehen und Empfehlungen für eine entsprechende Marken- und Imagebildung, Projektabschlussbericht*. Berlin.
- Durth, Werner, und Paul Sigel (2009): *Baukultur – Spiegel gesellschaftlichen Wandels*. Berlin.
- Ganser, Werner (2010): *Stammtisch versus Architektur, Auswirkungen von Skandalen auf Architekturprojekte*. Wien.
- Montag Stiftung Urbane Räume gAG, Montag Stiftung Jugend und Gesellschaft, Bund Deutscher Architekten BDA und Verband Bildung und Erziehung (VBE) (Ed.) (2013): *Leitlinien für leistungsfähige Schulbauten in Deutschland*. Bonn/Berlin.
- Rambow, Riklef (2010): *Experten-Laien-Kommunikation in der Architektur*. Münster.
- SRL – Vereinigung für Stadt-, Regional- und Landesplanung e. V.: *Über SRL. Aufgaben und Ziele*. Berlin. URL: <http://www.srl.de/%C3%BCber-srl/aufgaben-und-ziele.html> (Accessed 5/2014).
- Statistische Ämter des Bundes und der Länder (2014): *Gebäude- und Wohnungsbestand in Deutschland – Erste Ergebnisse der Gebäude- und Wohnungszählung 2011*, Hannover.

Current Challenges for Baukultur

- AGEB – Arbeitsgemeinschaft Energiebilanzen e. V. (2013): *Auswertungstabellen zur Energiebilanz für die Bundesrepublik Deutschland 1990 bis 2012*. Berlin.
- BBSR – Bundesinstitut für Bau-, Stadt- und Raumforschung im Bundesamt für Bauwesen und Raumordnung (BBR) (2013): *Interaktive Karte: Wachsende und schrumpfende Städte und Gemeinden*. Bonn. URL: http://www.bbsr.bund.de/BBSR/DE/Raumbeobachtung/InteraktiveAnwendungen/WachsenSchrumpfend/gemeinden_node.html (Accessed 3/2014).
- BBSR – Bundesinstitut für Bau-, Stadt- und Raumforschung im Bundesamt für Bauwesen und Raumordnung (BBR) (2012): *Mehrgenerationen-Wohnprojekte in der Rechtsform der eingetragenen Genossenschaft. Ergebnisse*. Bonn. URL: http://www.bbsr.bund.de/BBSR/DE/FP/ReFo/Wohnungswesen/2011/MehrgenerationenWohnen/01_Start.html?nn=439538¬First=true&docId=439332#doc439332bodyText1 (Accessed 3/2014).
- BBSR – Bundesinstitut für Bau-, Stadt- und Raumforschung im Bundesamt für Bauwesen und Raumordnung (BBR) (2011): *Auf dem Weg, aber noch nicht am Ziel – Trends der Siedlungsflächenentwicklung*. BBSR-Berichte KOMPAKT 10/2011. Bonn. URL: http://www.bbsr.bund.de/nn_21272/BBSR/DE/Veroeffentlichungen/BerichteKompakt/2011/BK102011.html (Accessed 3/2014).
- bcs – Bundesverband CarSharing e. V. (2014a): *Datenblatt CarSharing in Deutschland 2014*. Berlin.
- bcs – Bundesverband CarSharing e. V. (2014b): *Carsharing-Boom hält an*. Berlin. URL: <http://www.carsharing.de/presse/pressemitteilungen/carsharing-boom-haelt-an> (Accessed 3/2014).

- BITKOM – Bundesverband Information-
swirtschaft, Telekommunikation und Neue Medien
e. V. (Ed.) (2011) in Kooperation mit dem Bundesmin-
isterium für Umwelt, Naturschutz und Reaktorsicher-
heit (BMU) und dem Umweltbundesamt (UBA):
„Smart Cities“ – Grüne ITK zur Zukunftssicherung
moderner Städte. Diskussionspapier zur 5.
Jahreskonferenz BMU/UBA/BITKOM. URL: http://www.bitkom.org/files/documents/Smart_Cities_Studie_Mai_2011.pdf (Accessed 3/2014).
- BMFSFJ – Bundesministerium für Familie,
Senioren, Frauen und Jugend (2013): Teilzeitarbeit.
Berlin. URL: <http://www.bmfsfj.de/BMFSFJ/gleichstellung.did=88110.html> (Accessed 3/2014).
- BMI – Bundesministerium des Innern (Ed.) (2012):
Migrationsbericht des Bundesamtes für Migration
und Flüchtlinge im Auftrag der Bundesregierung
(Migrationsbericht 2012). Berlin.
- BMUB – Bundesministerium für Umwelt,
Naturschutz, Bau und Reaktorsicherheit (2014):
PresseDienst Nr. 023/14 – Bauen/Wohnen. Berlin.
- BMVBS – Bundesministerium für Verkehr, Bau
und Stadtentwicklung (Ed.) (2013a): Maßnahmen
zum Klimaschutz im historischen Quartier.
Kommunale Arbeitshilfe. Berlin. URL: http://www.bvbrs.bund.de/cdn_032/nn_627458/BBSR/DE/Veroeffentlichungen/BMVBS/Sonderveroeffentlichungen/2013/MassnahmenKlimaschutz.html (Accessed 3/2014).
- BMVBS – Bundesministerium für Verkehr, Bau
und Stadtentwicklung (Ed.) (2013b): Hochwasser-
schutzfibel. Objektschutz und bauliche Vorsorge.
Berlin. URL: http://www.bmvi.de/SharedDocs/DE/Anlage/BauenUndWohnen/hochwasserschutzfibel.pdf?__blob=publicationFile (Accessed 3/2014).
- BMVBS – Bundesministerium für Verkehr, Bau
und Stadtentwicklung (2010): Mobilität in
Deutschland 2008. Ergebnisbericht. Struktur –
Aufkommen – Emissionen – Trends. Berlin. URL:
http://www.mobilitaet-in-deutschland.de/pdf/MiD2008_Abschlussbericht_1.pdf (Accessed 5/2014).
- brandeins WirtschaftsMagazin (2014): Die Welt
in Zahlen. Ausgabe 03/2014. Hamburg. URL: <http://www.brandeins.de/archiv/2014/beobachten/die-welt-in-zahlen.html> (Accessed 3/2014).
- BSW-Solar – Bundesverband Solarwirtschaft e. V.
(2013): Statistische Zahlen der deutschen
Solarwärmebranche (Solarthermie). URL: www.solarwirtschaft.de/fileadmin/media/pdf/2013_2_BSW_Solar_Faktenblatt_Solarwaerme.pdf (Accessed 3/2014).
- BSW – Bundesverband Solarwirtschaft e. V. und
Solarpraxis AG (2010): Solarenergie in Deutschland.
Berlin. URL: http://www.renewablesinsight.com/fileadmin/documents/SEID10_low.pdf (Accessed 3/2014).
- (Die) Bundesregierung (2013): Deutschlands
Zukunft gestalten. Koalitionsvertrag zwischen CDU,
CSU und SPD. 18. Legislaturperiode. URL: <http://www.bundesregierung.de/Content/DE/StatischeSeiten/Breg/koalitionsvertrag-inhaltsverzeichnis.html> (Accessed 3/2014).
- (Die) Bundesregierung (2002): Perspektiven für
Deutschland. Unsere Strategie für eine nachhaltige
Entwicklung. Berlin. URL: http://www.bundesregierung.de/Content/DE/_Anlagen/Nachhaltigkeit-wiederhergestellt/perspektiven-fuer-deutschland-langfassung.pdf?__blob=publicationFile&v=2 (Accessed 3/2014).
- Bundeszentrale für politische Bildung (2013):
Zuwanderung, Flucht und Asyl: Aktuelle Themen.
Die aktuelle Entwicklung der Zuwanderung nach
Deutschland. Bonn. URL: <http://www.bpb.de/gesellschaft/migration/kurz dossiers/155584/deutschland?p=all> (Accessed 3/2014).
- Bürgerschaft der Freien und Hansestadt Hamburg
(2014): Bericht des Parlamentarischen Untersuchungs-
ausschusses „Elbphilharmonie“. Drucksache
20/11500. Hamburg.
- Destatis – Statistisches Bundesamt (2014a):
Bevölkerung. Auf einen Blick. Wiesbaden. URL: <https://www.destatis.de/DE/ZahlenFakten/Gesellschaft-Staat/Bevoelkerung/Sterbefaelle/Sterbefaelle.html> (Accessed 3/2014).
- Destatis – Statistisches Bundesamt (2014b):
Bodenfläche nach Nutzungsarten. Wiesbaden. URL:
<https://www.destatis.de/DE/ZahlenFakten/Wirtschaftsbereiche/LandForstwirtschaftFischerei/Flaechennutzung/Tabellen/Bodenflaeche.html>. (Accessed 3/2014).
- Destatis – Statistisches Bundesamt (2014c):
Energie, Rohstoffe, Emissionen – Energieverbrauch
der privaten Haushalte für Wohnen (temperatur-
bereinigt). Wiesbaden. URL: <https://www.destatis.de/DE/ZahlenFakten/GesamtwirtschaftUmwelt/Umwelt/UmweltoekonomischeGesamtrechnungen/EnergieRohstoffeEmissionen/Tabellen/EnergieverbrauchHaushalte.htm> (Accessed 3/2014).
- Destatis – Statistisches Bundesamt (2013a):
Pressemitteilung Nr. 431. 19,6 % der Bevölkerung
Deutschlands von Armut oder sozialer Ausgrenzung
betroffen. Wiesbaden. URL: https://www.destatis.de/DE/PresseService/Presse/Pressemitteilungen/2013/12/PD13_431_634.html (Accessed 5/2014).
- Destatis – Statistisches Bundesamt (2013b):
Datenreport 2013. Bonn.
- Destatis – Statistisches Bundesamt (2013c):
Land- und Forstwirtschaft, Fischerei. Bodenfläche
nach Art der tatsächlichen Nutzung 2012. Wies-
baden. URL: https://www.destatis.de/DE/Publikationen/Thematisch/LandForstwirtschaft/Flaechennutzung/BodenflaechennutzungPDF_2030510.pdf?__blob=publicationFile (Accessed 3/2014).
- Destatis – Statistisches Bundesamt (2009):
Bevölkerung Deutschlands bis 2060. 12. koordinierte
Bevölkerungsvorausberechnung. Wiesbaden.
URL: https://www.destatis.de/DE/Publikationen/Thematisch/Bevoelkerung/Vorausberechnung-Bevoelkerung/BevoelkerungDeutschland-2060Presse5124204099004.pdf?__blob=publicationFile (Accessed 3/2014).
- Deutscher Paritätischer Wohlfahrtsverband
Gesamtverband e.V. (2013): Zwischen Wohlstand
und Verarmung: Deutschland vor der Zerreißprobe.
Bericht zur regionalen Armutsentwicklung in
Deutschland 2013. Berlin.
- Difu – Deutsches Institut für Urbanistik gGmbH
(2013): Kommunale Straßenbrücken – Zustand
und Erneuerungsbedarf. Berlin. (Bearbeitung: Dr.
Wulf-Holger Arndt, Dr. Busso Grabow, Univ.-Prof. Dr.
Klaus J. Beckmann, Dr. Marion Eberlein) URL: <http://www.difu.de/publikationen/2013/kommunale-strassenbruecken-zustand-und-erneuerungsbedarf.html> (Accessed 3/2014).
- Difu – Deutsches Institut für Urbanistik (2010):
Stadtpolitik und das neue Wohnen in der Innenstadt.
Berlin. (Bearbeitung: Gregor Jekel, Franciska Frölich
v. Bodelschwingh, Hasso Brühl, Claus-Peter Echter).
URL: <http://www.difu.de/publikationen/2010/stadtpolitik-und-das-neue-wohnen-in-der-innenstadt.html> (Accessed 3/2014).
- DIW Berlin – Deutsches Institut für Wirtschafts-
forschung e. V. (2011): DIW Wochenbericht.
Energiewende: Fokus Gebäude. Berlin. URL: https://www.diw.de/documents/publikationen/73/diw_01.c.377834.de/11-34.pdf (Accessed 3/2014).
- DIW Berlin – Deutsches Institut für Wirtschafts-
forschung e. V. (2010): DIW Wochenbericht.
Nr. 19/2010. Berlin. URL: https://www.diw.de/documents/publikationen/73/diw_01.c.356610.de/10-19.pdf (Accessed 3/2014).
- DST – Deutscher Städtetag (2012): Gemeindefi-
nanzbericht 2012. Köln.
- Fuhrhop, Daniel (2013): Warum wir das Bauen
verboten sollten, in: PlanerIn, Nr. 5.
- GdW Bundesverband deutscher Wohnungs- und
Immobilienunternehmen e. V. (Ed.) (2014):
Wohntrends 2030. Studie. GdW Branchenbericht 6.
Berlin.
- Hochschule Niederrhein (2013): eWeb Research
Center: Antworten geben. Krefeld. URL: <http://www.hs-niederrhein.de/forschung/eweb-research-center/> (Accessed 3/2014).
- HSH Nordbank AG (Ed.) (2013): Einzelhandel im
Wandel. Hamburg. (Bearbeitung: Hamburgisches
Weltwirtschaftsinstitut HWWI). URL: http://www.hwwi.org/fileadmin/hwwi/Publikationen/Partnerpublikationen/HSH/2013_05_23_HSH_HWWI_Einzelhandel.pdf (Accessed 3/2014).
- infas Institut für angewandte Sozialwissenschaft
GmbH (2012): Intelligenter mobil – wie sind wir im
Alltag unterwegs? Ergebnisse einer repräsentativen
Bevölkerungsbefragung. Bonn. URL: <http://www.infas.de/forschungsbereiche/verkehrsforschung/trendanalysen/mobilitaet-von-morgen/> (Accessed 3/2014).
- Keller, Berndt, Susanne Schulz und Hartmut
Seifert (2012): Entwicklung und Strukturmerkmale
der atypisch Beschäftigten in Deutschland bis 2010.
WSI-Diskussionspapier Nr. 182. Oktober 2012. In:
Böckler impuls 17/2012. Düsseldorf. URL: http://www.boeckler.de/impuls_2012_17_4-5.pdf (Accessed 3/2014).
- KfW – KfW Bankengruppe (Ed.) (2013):
KfW-Kommunalpanel 2012. Frankfurt/Main.
- KfW – KfW Bankengruppe (Ed.) (2012):
KfW-Kommunalpanel 2011. Frankfurt/Main.
- Kommission „Zukunft der Verkehrsinfrastruktur-
finanzierung“ (2012): Zukunft der Verkehrsinfra-
strukturfinanzierung. Bericht der Kommission. O.O.
URL: <http://www.vdv.de/bericht-daehre-kommission-dezember-2012.pdf?forced=true> (Accessed 3/2014).
- Munich Re – Münchener Rückversicherungs-
Gesellschaft (2013): GeoRisikoForschung,
NatCatSERVICE, München.
- (Der) Postillon (2013): Lego startet neue Serie
„Gescheiterte deutsche Großprojekte“. Fürth. URL:
<http://www.der-postillon.com/2013/02/lego-startet-neue-serie-ge-scheiterte.html> (Accessed 3/2014).
- SAB Sächsische AufbauBank (2014): Richtlinie
Hochwasserschäden 2013 – Aufbauhilfen für
Unternehmen. Dresden. URL: http://www.sab.sachsen.de/de/p_is/detailfp_is_51712.jsp (Accessed 3/2014).
- SINUS Markt- und Sozialforschung GmbH und
wahrZeichen® Allianz (2013): Special Interest Paket
Wohn- und Lebenswelten. Die aktuellen wahr-
rZeichen-Sinus-Milieus®. Heidelberg.
- SINUS Markt- und Sozialforschung GmbH (2011):
Informationen zu den Sinus-Milieus® 2011.
Heidelberg. URL: http://www.sinus-institut.de/uploads/tx_mpdownloadcenter/Informationen_Sinus-Milieus_042011.pdf (Accessed 3/2014).
- Staatsministerium Baden-Württemberg (2013):
Land beantragt im Bundesrat Fortführung des
Gemeindeverkehrsfinanzierungsgesetzes. Stuttgart.

URL: <http://www.baden-wuerttemberg.de/de/service/presse/pressemitteilung/pid/baden-wuerttemberg-beantragt-imb-badensrat-fortfuehrung-des-gemeindeverkehrsfinanzierungsgesetzes/> (Accessed 3/2014).

- Stadt Karlsruhe (2014): SmarterCity Karlsruhe. Karlsruhe. URL: <http://www.karlsruhe.de/b2/wifoe/netzwerke/smartercity.de> (Accessed 3/2014).
- Stadt Köln (2013): SmartCity Cologne: Wir gestalten die Energiewende Köln. Köln. URL: <http://www.stadt-koeln.de/1/presse-service/mitteilungen/2013/08698/> (Accessed 3/2014).
- Verwaltungsvereinbarung Städtebauförderung 2013 über die Gewährung von Finanzhilfen des Bundes an die Länder nach Artikel 104 b des Grundgesetzes zur Förderung städtebaulicher Maßnahmen. Berlin. URL: http://www.staedtebauforderung.info/cfn_031/nn_486964/sid_2A933709AC927A4E69B257A4901E2E46/nsc_true/SharedDocs/Publikationen/StBauF/VVStaedtebauforderung2013.html (Accessed 3/2014).
- Westfälische Wilhelms-Universität Münster (2013): Herzlich Willkommen auf den Internet-Seiten des Netzwerks Multilokalität! Münster. URL: <http://www.uni-muenster.de/Geographie/Multilokalitaet/multilokalitaet/home.html> (Accessed 3/2014).

Current Focus Areas of the Federal Foundation of Baukultur – Residential and Mixed Neighbourhoods

- Architekturfakultät der Technischen Universität Graz (Ed.) (2012): GAM 8: Dense Cities – Architecture for Living Closer Together. Graz Architektur Magazin. Graz.
- BBR – Bundesamt für Bauwesen und Raumordnung (Ed.) (2000): Nutzungsmischung im Städtebau. Endbericht. Werkstatt: Praxis Heft 2/2000. Bonn.
- <http://www.bbsr.bund.de/BBSR/DE/WohnenImmobilen/Immobilienmarktbeobachtung/ProjekteFachbeitraege/MietenPreise/Wohnnebenkosten/Wohnnebenkosten.html?nn=446450> (Accessed 3/2014).
- BBSR – Bundesinstitut für Bau-, Stadt- und Raumforschung im Bundesamt für Bauwesen und Raumordnung (BBR) (Ed.) (2013): Ziel nachhaltiger Stadtquartiersentwicklung. Bonn.
- BBSR – Bundesinstitut für Bau-, Stadt- und Raumforschung im Bundesamt für Bauwesen und Raumordnung (BBR) (2012a): Anstieg großer Wohnungstransaktionen in 2012. Bonn.
- BBSR – Bundesinstitut für Bau-, Stadt- und Raumforschung im Bundesamt für Bauwesen und Raumordnung (BBR) (2012b): Immobilienpreise und Transaktionen am Wohnimmobilienmarkt. Bonn.
- BBSR – Bundesinstitut für Bau-, Stadt- und Raumforschung im Bundesamt für Bauwesen und Raumordnung (BBR) (2012c): Lebensraum Stadtquartier – Leben im Hier und Jetzt. Informationen zur Raumentwicklung. 3/4.2012. Bonn.
- BBSR – Bundesinstitut für Bau-, Stadt- und Raumforschung im Bundesamt für Bauwesen und Raumordnung (BBR) (2011a): Mieten und Preise: Wohnimmobilien. Wohnnebenkosten. Bonn. URL: <http://www.bbsr.bund.de/BBSR/DE/WohnenImmobilen/Immobilienmarktbeobachtung/ProjekteFachbeitraege/MietenPreise/Wohnnebenkosten/Wohnnebenkosten.html?nn=396022> (Stand: 5/2014).
- BBSR – Bundesinstitut für Bau-, Stadt- und Raumforschung im Bundesamt für Bauwesen und Raumordnung (BBR) (Ed.) (2011b): Neues Wohnen in Genossenschaften. Bonn.
- BDA – Bund Deutscher Architekten (Ed.) (2014): Deutsches Architektenblatt, Heft 02/2014. Düsseldorf.
- BDA – Bund Deutscher Architekten (Ed.) (2012): 19 Thesen zum Thema „Dichte“ von Prof. Dietmar Eberle, Zürich/Lochau, vorgetragen beim BDA Hamburg Architektur Club am 30. Januar 2012. Hamburg.
- BMUB – Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit, vertreten durch das Bundesinstitut für Bau-, Stadt- und Raumforschung (BBSR) im Bundesamt für Bauwesen und Raumordnung (BBR) (Ed.) (2014): Neues Wohnen – Gemeinschaftliche Wohnformen bei Genossenschaften. Berlin. (Veröffentlichung in Vorbereitung)
- BMVBS – Bundesministerium für Verkehr, Bau und Stadtentwicklung (Ed.) (2013): Altersgerecht umbauen – Mehr Lebensqualität durch weniger Barrieren. Berlin.
- BMVBS – Bundesministerium für Verkehr, Bau und Stadtentwicklung (2012a): Urbane Energien. Positionen des Kuratoriums zur Nationalen Stadtentwicklungspolitik 2012. Berlin.
- BMVBS – Bundesministerium für Verkehr, Bau und Stadtentwicklung (2012b): Memorandum „Städtische Energien – Zukunftsaufgaben der Städte“. Berlin.
- BMVBS – Bundesministerium für Verkehr, Bau und Stadtentwicklung (Ed.) (2012c): 5 Jahre LEIPZIG CHARTA – Integrierte Stadtentwicklung als Erfolgsbedingung einer nachhaltigen Stadt. Integrierte Stadtentwicklung in den 27 Mitgliedsstaaten der EU und ihren Beitrittskandidaten. Berlin.
- BMVBS – Bundesministerium für Verkehr, Bau und Stadtentwicklung (2011a): Weißbuch Innenstadt. Starke Zentren für unsere Städte und Gemeinden. Berlin.
- BMVBS – Bundesministerium für Verkehr, Bau und Stadtentwicklung (2011b): Stadtentwicklung und Image – Städtebauliche Großprojekte in Metropolräumen. Berlin.
- BMVBS – Bundesministerium für Verkehr, Bau und Stadtentwicklung (Ed.) (2011c): Wohnen im Alter. Berlin.
- Bundesamt für Raumentwicklung (ARE)/ Bundesamt für Migration (BFM)/ Bundesamt für Wohnungswesen (BWO)/ Bundesamt für Sport (BASPO)/ Fachstelle für Rassismusbekämpfung (FRB)/ Eidgenössische Kommission für Migrationsfragen (EKM) (Ed.) (2011): Soziale Mischung und Quartierentwicklung: Anspruch versus Machbarkeit. Bern.
- Destatis – Statistisches Bundesamt (2013): Mikrozensus 2012 – Bevölkerung und Erwerbstätigkeit – Beruf, Ausbildung und Arbeitsbedingungen der Erwerbstätigen in Deutschland. Wiesbaden.
- Destatis – Statistisches Bundesamt (2012): Gebäude und Wohnungen, Bestand an Wohnungen und Wohngebäuden. Wiesbaden.
- Destatis – Statistisches Bundesamt (2009): Mikrozensus 2008 – Bevölkerung und Erwerbstätigkeit – Beruf, Ausbildung und Arbeitsbedingungen der Erwerbstätigen in Deutschland. Wiesbaden.
- Deutsche Bundesbank (2014): Monatsbericht Februar 2014. Frankfurt/Main.
- Deutscher Bundestag (2012): Schriftliche Fragen mit den in der Woche vom 30. Juli 2012 eingegangenen Antworten der Bundesregierung. Drucksache 17/10425 vom 03.08.2012. Berlin.
- Difu – Deutsches Institut für Urbanistik im Auftrag des Bundesministeriums für Umwelt, Naturschutz, Bau und Reaktorsicherheit, vertreten durch das Bundesinstitut für Bau-, Stadt- und Raumforschung (BBSR) im Bundesamt für Bauwesen und Raumordnung (BBR) (Ed.) (2014): Grundlagenforschung zur Baugebietstypologie der Baunutzungsverordnung. Endbericht. Berlin.
- Doehler-Bezadi, Marta (2009): Wieviel Gestaltung braucht die Stadt? Wieviel Gestaltung braucht das Quartier? In: Bartholomäus, Heike, Tanja Blankenburg, Katharina Fleischmann, Ilka Schiller und Lutz Wüllner (Ed.): Wie viel Gestaltung braucht die Stadt? Cottbus, S. 113–120.
- Dohnke, Jan, Antje Seidel-Schulze und Hartmut Häußermann (2012): Segregation, Konzentration, Polarisierung – Sozialräumliche Entwicklung in deutschen Städten 2007–2009. Difu-Impulse Bd. 4/2012. Berlin.
- EHI – EuroHandelsinstitut (2013): Handelsdaten aktuell 2013. Köln.
- EHI – EuroHandelsinstitut (2005): Handel aktuell. Köln.
- empirica im Auftrag des Bundesverbandes Baugemeinschaften e. V. (Ed.) (2011): Auswertung der Städteumfrage 2011 des Bundesverbandes Baugemeinschaften e. V. Berlin.
- Freie und Hansestadt Hamburg (Ed.) (2013): Mehr Stadt in der Stadt – Chancen für mehr urbane Wohnqualität in Hamburg. Hamburg.
- Freie und Hansestadt Hamburg – Behörde für Stadtentwicklung und Umwelt (Ed.) (2010): Hamburger Leitfaden Lärm in der Bauleitplanung 2010. Hamburg.
- GdW Bundesverband deutscher Wohnungs- und Immobilienunternehmen e. V. (Ed.) (2014): Wohntrends 2030. Studie. GdW Branchenbericht 6. Berlin.
- HafenCity Hamburg GmbH/Freie und Hansestadt Hamburg (Ed.) (2011): Schallschutz bei teilgeöffneten Fenstern. Übersicht für Architekten, Ingenieure und Investoren. Hamburg.
- Harlander, Tilman, Gerd Kuhn, Wüstenrot Stiftung (Ed.) (2012): Soziale Mischung in der Stadt. Case Studies, Wohnungspolitik in Europa, Historische Analyse. Stuttgart/Zürich.
- Holm, Andrej (2012): Gentrification. In: Eckardt, Frank (Ed.) (2012): Handbuch Stadtsoziologie. Wiesbaden.
- INSM – Initiative Neue Soziale Marktwirtschaft (2009): Wohlstandsbilanz Deutschland 2009, Lebensqualität, Größer Wohnen. URL: www.wohlstandsbilanz-deutschland.de/groesser-wohnen.html (Stand 3/2014).
- Jekel, Gregor, Franciska Frölich von Bodelschwingh, Hasso Brühl, and Claus-Peter Echter (2010): Stadtpolitik und das neue Wohnen in der Innenstadt. Edition Difu – Stadt Forschung Praxis. Bd. 8. Berlin.
- Jost, Frank (2011): Wohnen in der Innenstadt. Modeerscheinung oder nachhaltiger Trend?. In: Wohnbund Information – Urbane Zukünfte, Nr. 02+03/2011, München, S. 12–15.
- Landeshauptstadt München (Ed.) (2009): Sozialgerechte Bodennutzung – Der Münchener Weg. München.
- Leipzig Charta zur nachhaltigen europäischen Stadt. Angenommen anlässlich des informellen Ministertreffens zur Stadtentwicklung und zum territorialen Zusammenhalt in Leipzig am 24./25. Mai 2007.
- MBV – Ministeriums für Bauen und Verkehr des Landes Nordrhein-Westfalen (2009): Instrumente und Projektskizzen. Konzeptbausteine Impulse für Neues Wohnen in der Innenstadt. Schlussbericht. Düsseldorf.
- MBWSV – Ministerium für Bauen, Wohnen, Stadtentwicklung und Verkehr des Landes Nordrhein-Westfalen (2014): Bericht zur Stadtentwicklung 2013 – Quartiere im Fokus. Düsseldorf.

- Roskamm, Nikolai (2013): Das Leitbild von der „Urbanen Mischung“ – Geschichte, Stand der Forschung, Ein- und Ausblicke. Studie im Auftrag der Senatsverwaltung für Stadtentwicklung und Umwelt. Berlin.
- Senftleben, Ines (2011): Vom „Konservierten Stadtquartier“ zum Quartier mit Zukunft. In: Wohnbund Information – Urbane Zukünfte, Nr. 02+03/2011, München, S. 43–46.
- Spiegel, Erika (2001): Soziale Stabilisierung durch soziale Mischung. In: vhw Forum Wohnen und Stadtentwicklung, Heft 2, April 2001. Berlin.

Current Focus Areas of the Federal Foundation of Baukultur – Public Space and Infrastructure

- bcs – Bundesverband CarSharing e. V. (2014): Carsharing-Boom hält an. Berlin. URL: <http://www.carsharing.de/presse/pressemitteilungen/carsharing-boom-haelt-an> (Accessed 3/2014).
- Berding, Ulrich, Oliver Kuklinski und Klaus Selle (o.J.): Handlungsfeld öffentliche Räume – Zwischenergebnisse eines Forschungsprojektes. URL: http://www.plankom.net/pdf/pub/handlungsfeld_oeffentliche_raeume.pdf (Accessed 3/2014).
- Bundesingenieurkammer und Verband Beratender Ingenieure (VBI) (2014): Der Deutsche Brückenbaupreis 2014. Berlin. URL: <http://www.brueckenbaupreis.de/html/2262.htm> (Accessed 3/2014).
- (Die) Bundesregierung (2014): Stromautobahnen. Herzstück einer neuen Energieinfrastruktur. [Internet]. Berlin. URL: <http://www.bundesregierung.de/Content/DE/StatischeSeiten/Breg/Energiekonzept/2-EnergieTransportieren/2012-04-18-stromautobahnen-herzstueck-einer-neuen-energieinfrastruktur.html> (Accessed 3/2014).
- DB AG (Ed.) (2008): Leitfaden Gestalten von Eisenbahnbrücken. In: DB Netze. Berlin.
- Destatis – Statistisches Bundesamt (2014): Flächennutzung. Bodenfläche nach Nutzungsarten. Wiesbaden. URL: <https://www.destatis.de/DE/ZahlenFakten/Wirtschaftsbereiche/Land-ForstwirtschaftFischerei/Flaechennutzung/Tabellen/Bodenflaeche.html> (Accessed 3/2014).
- DFV – Deutscher Franchise Verband e. V. (2013): Franchisewirtschaft wächst 2012 deutlicher als in Vorjahren. Berlin. URL: <http://franchise.blog.de/2013/04/10/franchisewirtschaft-waechst-2012-deutlicher-vorjahren-15741215/> (Accessed 3/2014).
- Difu – Deutsches Institut für Urbanistik (2013a): Hauptverkehrsstraßen und integrierte Innenstadtentwicklung. Seminar am 9. und 10.12.2013. Berlin. URL: <http://www.difu.de/veranstaltungen/2013-12-09/hauptverkehrsstraessen-und-integrierte-innenstadtentwicklung.html> (Accessed 3/2014).
- Difu – Deutsches Institut für Urbanistik (2013b): Doppelte Innenentwicklung. Strategien, Konzepte und Kriterien im Spannungsfeld von Städtebau, Freiraumplanung und Naturschutz. In: Difu-Berichte Heft 4/2013. Berlin.
- Difu – Deutsches Institut für Urbanistik (2012a): Altgerechter Umbau der Infrastruktur. Investitionsbedarf der Städte und Gemeinden. Difu-Impulse. Bd. 6/2012. Berlin.
- Europäische Kommission (2013): Vorschlag für eine RICHTLINIE DES EUROPÄISCHEN PARLAMENTS UND DES RATES über den Aufbau der Infrastruktur für alternative Kraftstoffe. Brüssel. URL: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2013:0018:FIN:DE:PDF> (Accessed 3/2014).
- Freie und Hansestadt Hamburg (2013): Mehr Stadt in der Stadt. Gemeinsam zu mehr Freiraumqualität in Hamburg. Hamburg.
- HafenCity Universität Hamburg (HCU) (2012): Pflege von öffentlichen Freiräumen mit/von Privaten. Dokumentation. Werkstattgespräch vom 29.08.2012. Hamburg. URL: http://www.northsearegion.eu/files/repository/20121218150559_Hamburg-Stakeholder-Workshop-in-Germany%5B1%5D.pdf (Accessed 3/2014).
- Hessisches Ministerium für Wirtschaft, Verkehr und Landesentwicklung (2012): Freiräume entwickeln, Lebensräume schaffen. 9 Strategien, 5 Statements, 1 Ziel. Wiesbaden.
- Heuer Dialog GmbH – Prof. Dr.-Ing. Hartmut H. Topp (2011): Städtische Mobilität ohne Emissionen – eine Vision? Insight Newsletter. Düsseldorf. URL: <http://www.heuer-dialog.de/insight-3-2011-Hartmut-Topp-Mobilitaetskonzepte> (Accessed 3/2014).
- Husqvarna Group (2013): GLOBAL Green Space Report 2013. Exploring our relationship to forests, parks and gardens around the globe. Stockholm. URL: <http://husqvarnagroup.com/en/press/green-space-report> (Accessed 3/2014).
- KfW – KfW Bankengruppe (2013): KfW-Kommunalpanel 2012. Frankfurt/Main.
- Landeshauptstadt Hannover: „Hannover schafft Platz“. Stadtplatzprogramm Hannover. Ein innovatives Programm für öffentliche Plätze in den Stadtteilen. URL: <http://www.hannover.de/Leben-in-der-Region-Hannover/Planen,-Bauen,-Wohnen/Stadtplanung-Stadtentwicklung/Konzepte-Projekte/Stadtplatzprogramm-Hannover> (Accessed 3/2014).
- Landeshauptstadt München (2013): Gestaltung Öffentlicher Raum und Stadtbildpflege. Prägende Elemente des öffentlichen Raums. München. URL: <http://www.muenchen.de/rathaus/Stadtverwaltung/baureferat/oeffentlicher-raum.html> (Accessed 3/2014).
- Landeshauptstadt Saarbrücken (2014): Stadtmitte am Fluss. Saarbrücken URL: http://www.saarbruecken.de/de/rathaus/stadtentwicklung/stadtmitte_am_fluss (Accessed 3/2014).
- Markt1-Verlag in Kooperation mit dem Zeitverlag (2013): Infrastruktur. Ein Zustandsbericht. Essen.
- Mettelsiefen, Kai (2001): Öffentlicher Raum – Platz für die Zukunft (Teil 1/Thesen). Köln. URL: http://www.koelnarchitektur.de/pages/de/home/news_archiv/544.htm (Accessed 3/2014).
- Ministerium für Bauen, Wohnen, Stadtentwicklung und Verkehr des Landes Nordrhein-Westfalen (Ed.) (2013) – Bläser, Kerstin, Rainer Danielzyk, Runrid Fox-Kämper, Linda Funke, Myriam Rawak und Martin Sondermann: Urbanes Grün in der integrierten Stadtentwicklung. Strategien, Projekte, Instrumente. Düsseldorf.
- Peters, Cornelia (2012): Verdichtung? Ja aber... In: Garten + Landschaft 4/2012. München.
- Redaktion DerEnergieblog.de – Becker Büttner Held (2013): Kommt die Grüne Welle dank Europa doch noch? Berlin. URL: <http://www.derenergieblog.de/alle-themen/emissionshandel/kommt-die-gruene-welle-dank-europa-doch-noch/> (Accessed 3/2014).
- Regierung von Unterfranken (2012): Hochwasserschutz. Würzburg. URL: <http://www.regierung.unterfranken.bayern.de/aufgaben/6/3/00623/index.html> (Accessed 3/2014).
- Schindecker, Erika (o.J.): Stadtverträgliche Werbung an Baugerüsten. In: Haus und Grund München informiert. Öffentliches Baurecht. München. URL: http://www.baugenehmigung-muenchen.info/fileadmin/PDFs_Presspiegel/PDFs_1/werbung_baugeruest.pdf (Accessed 3/2014).
- Selle, Klaus (2008): Öffentliche Räume – Eine Einführung. Begriff, Bedeutung und Wandel der öffentlich nutzbaren Räume in den Städten. Aachen. URL: <http://services.arch.rwth-aachen.de/studium/bachelor/c3a-oeffentliche-raeume-eine-einfuehrung.pdf> (Accessed 3/2014).
- (Der) Senator für Umwelt, Bau und Verkehr (2014): Shared Space und Begegnungszonen. Bremen. URL: <http://www.baumwelt.bremen.de/detail.php?gsid=bremen213.c.3833.de> (Accessed 3/2014).
- Senatsverwaltung für Stadtentwicklung und Umwelt (2012): Strategie Stadtlandschaft Berlin. natürlich urban produktiv. Berlin.
- Stadt Bretten (2010): Richtlinien zur Förderung der Stadtbildpflege. Richtlinien der Stadt Bretten für die Gewährung von Zuschüssen zur Durchführung von stadtbildgestaltenden Maßnahmen, Stadtbildpflegerichtlinien). Bretten. URL: http://www.bretten.de/cms/sites/default/files/stadtbild_richtlinie.pdf (Accessed 3/2014).
- Stadt Minden (2014): Blick in die Zukunft: Illustrationen zeigen Scharn nach Neugestaltung. Minden. URL: <http://www.minden.de/internet/page.php?site=17&id=7002427> (Accessed 3/2014).
- Stadt Münster (2014): Bürgerhaushalt Münster. Ergebnisse der Vorjahre. Paten für Grünflächen, Spielplätze, Gehwege. Münster. URL: http://buergerhaushalt.stadt-muenster.de/ergebnisse-der-vorjahre/buergerhaushalt-2011/vorschlaege-2011/listentyp/erweiterte_ansicht/buergerhaushalt/vorschlag/detailansicht/paten-fuer-gruenflaechen-spielplaetze-gehwege.html (Accessed 3/2014).
- Stadt Münster (2008): Denkmal Heute Denkmal Morgen. 30 Jahre Denkmalpflege, Stadtgestaltung und Archäologie. Münster.
- Stadtplanungsamt Frankfurt am Main (2014): Öffentlicher Raum. Frankfurt am Main. URL: http://www.stadtplanungsamt-frankfurt.de/oeffentlicher_raum_4561.html?psid=gognvl (Accessed 3/2014).
- Stadtratsfraktion Bündnis 90/Die Grünen – rosa liste (2008): Platzprogramm gefordert: Rot-grün will den öffentlichen Raum zurückerobern. Pressemitteilung vom 26.09.2008. München. URL: <http://gruene-fraktion-muenchen.de/platzprogramm-gefodert-rot-grun-will-den-offentlichen-raum-zuruckerobern/> (Accessed 3/2014).
- Statistisches Amt der Landeshauptstadt München (2011): „MADE IN GERMANY“ – 125 Jahre Automobil. Eine nicht nur statistische Rückschau. (Bearbeitung: Adriana Wenzlaff). In: Münchner Statistik. 4. Quartalsheft. Jahrgang 2011. München. URL: <http://www.muenchen.de> (Accessed 3/2014).
- Stiftung Lebendige Stadt (o.J.): Der öffentliche Raum: tragendes Element der Europäischen Stadt. Statements. Folkert Kiepe Beigeordneter des Deutschen Städtetages, Leiter des Dezernats Stadtentwicklung, Bauen, Wohnen und Verkehr. Hamburg. URL: <http://www.lebendige-stadt.de/web/template2neu.asp?sid=184&nid=&cof=184> (Accessed 3/2014).
- Technische Universität Dortmund – Gruehn, Dietwald, und Anne Hoffmann (2010): Bedeutung von Freiräumen und Grünflächen in deutschen Groß- und Mittelstädten für den Wert von Grundstücken und Immobilien. LLP-report 010. Dortmund. URL: http://www.galk.de/projekte/pr_down/LLP_report_010_final_100318.pdf (Stand: 3/2014).

- Technische Universität Dresden, Verkehrs- und Infrastrukturplanung (2011): Zukunft von Mobilität und Verkehr. Auswertungen wissenschaftlicher Grunddaten, Erwartungen und abgeleiteter Perspektiven des Verkehrswesens in Deutschland. Forschungsbericht FE-Nr.: 96.0957/2010/ im Auftrag des Bundesministers für Verkehr, Bau und Stadtentwicklung (BMVBS). Dresden.
- (die) urbanauten (2010): Privatisierung des öffentlichen Raumes – was ist das? München. URL: <http://www.die-urbanauten.de/wordpress/?p=636>. (Accessed 3/2014).
- Verlag Georg D.W. Callweg GmbH & Co. KG (Ed.) (2012): Urban Quality Award 2011. München. URL: http://www.gartenlandschaft.de/fileadmin/user_upload/garten/UQA_2011_deutsch.pdf (Stand: 3/2014).
- Wilberg, Bernd (2012): Mehr Brüsseler Plätze! In: StadtRevue. Das Kölnmagazin. 07-12. Köln.

Current Focus Areas of the Federal Foundation of Baukultur – Planning Culture and Process Quality

- Architekten- und Stadtplanerkammer Hessen (2013): Temporärer Gestaltungsbeirat, Der Gestaltungsbeirat – Ein Mehrwert für die Stadt und ihre Bewohner. Wiesbaden.
- Architekten- und Stadtplanerkammer Hessen (2011): Architektenwettbewerb – leicht und effizient – auch bei kleinen Bauaufgaben. Wiesbaden.
- BAK – Bundesarchitektenkammer (2012): Wettbewerbsstatistik 2004–2011. Berlin.
- Bauinfoconsult (2013): 9 Milliarden Fehlerkosten im Jahr – und so geht es auch bis 2015 weiter, Pressemitteilung. Düsseldorf.
- Baumeister, Nicolette (2012): Akteurskonstellation und Planungsprozess. In: Bundesstiftung Baukultur (Ed.): Was riskiert die Stadt? Baukultur im Klimawandel. Potsdam: S. 56–59.
- Baumeister (2011): Die Architektenstudie Nr. 2 – Wie Architekten arbeiten. München.
- Bertelsmann Stiftung (2011): Bundesbürger möchten sich politisch beteiligen, vor allem aber mitentscheiden. Gütersloh. URL: http://www.bertelsmann-stiftung.de/bst/de/media/xcms_bst_dms_34119_34120_2.pdf (Accessed 3/2014).
- BDA – Bund Deutscher Architekten (2011): Gestaltungsbeiräte – Mehr Kommunikation, mehr Baukultur. Berlin.
- BMVBS – Bundesministerium für Verkehr, Bau und Stadtentwicklung (Ed.) (2013a): Aufwendungen bei der Vergabe von Planungsleistungen, Evaluierung der zeitlichen Abläufe und monetären Aufwendungen bei Vergabeverfahren von Planungsleistungen im Hochbau. Berlin.
- BMVBS – Bundesministerium für Verkehr, Bau und Stadtentwicklung (2013b): Kompass Jugendliche und Stadtentwicklung. Berlin.
- BMVBS – Bundesministerium für Verkehr, Bau und Stadtentwicklung (2012): Kommunale Kompetenz Baukultur. Berlin.
- BMVBS – Bundesministerium für Verkehr, Bau und Stadtentwicklung (2011): Leitfaden Eigentümerstandortgemeinschaften. Berlin.
- BMVBS – Bundesministerium für Verkehr, Bau und Stadtentwicklung (2010): Kreativität planen – Positionen zum Wesen unserer gebauten und gelebten Umwelt. Bonn.
- BMVBS – Bundesministerium für Verkehr, Bau und Stadtentwicklung (Ed.) (2009): Bürgermitwirkung im Stadtbau. Berlin.

- Bundesstiftung Baukultur (2014): Netzwerk. Potsdam. URL: <http://www.bundesstiftung-baukultur.de/netzwerk> (Accessed 3/2014).
- Coles, Larissa (2012): Projektentwickler als Stadtgestalter – Typologisierung von Wertschöpfungsstrategien im Spannungsfeld von Stadtproduktion, Bauqualität und wirtschaftlichem Interesse. Weimar.
- Conradi, Peter (2011): Bürgerbeteiligung an der Stadtplanung. In: Wohnbund Information – Urbane Zukünfte. Nr. 02+03. München. pp. 57–59.
- Destatis – Statistisches Bundesamt (2013): Finanzen und Steuern, Personal des öffentlichen Dienstes 2012, Fachserie 14 Reihe 6. Wiesbaden.
- Deutscher Bundestag (2013): Stadtentwicklungsbericht 2012 – Unterrichtung durch die Bundesregierung, Drucksache 17/14450. Berlin.
- Difu – Deutsches Institut für Urbanistik (2013): Auf dem Weg, nicht am Ziel – Aktuelle Formen der Bürgerbeteiligung, Ergebnisse einer Kommunalbefragung. Berlin.
- Difu – Deutsches Institut für Urbanistik (2011): Stärken- und Schwächenanalyse für das technische Referendariat mit Vorschlägen zum weiteren Vorgehen und Empfehlungen für eine entsprechende Marken- und Imagebildung. Berlin.
- Förderverein Bundesstiftung Baukultur e. V. (2014): Gestaltungsbeiräte in Deutschland. Berlin.
- Holm, Andrej, and Dirk Gebhardt (2011): Initiativen für ein Recht auf Stadt. Theorie und Praxis städtischer Aneignung. Hamburg.
- Initiative D21 e. V./TNSInfratest GmbH (2013): D21-Digital-Index. Berlin.
- Planersocietät (2007): Fallstudienbezogene Evaluation von Bebauungsplanprozessen, Abschlussbericht im Auftrag der Stadt Gütersloh. Dortmund.
- Reicher, Christa, Lars Niemann, and Angela Uttke (Ed.) (2011): Internationale Bauausstellung Emscher Park: Impulse. Essen.
- Reicher, Christa, Silke Edelhoff, Paivi Kataikko and Angela Uttke (Ed.) (2006): Kinder_Sichten. Troisdorf.
- Rösener, Britta, and Klaus Selle (2007): Mit Planungskultur zur Baukultur – Zwölf Grundsätze zur Gestaltung kommunikativer Prozesse. In: PlanerIn Nr. 6. Berlin, pp. 12–14.
- Selle, Klaus (2013): Über Bürgerbeteiligung hinaus. Stadtentwicklung als Gemeinschaftsaufgabe? Analysen und Konzepte. Detmold.
- Selle, Klaus (2011): Alltagstauglich? Bürgerbeteiligung als „urbane Kommunikation“. In: Wohnbund Information – Urbane Zukünfte. Nr. 02+03. München, pp. 60–63.
- SRL – Vereinigung für Stadt-, Regional- und Landesplanung (2012): Pixel, Bits & Netzwerke. Planung im digitalen Zeitalter. PlanerIn. Nr. 5. Berlin.
- Statistisches Bundesamt (2013): Finanzen und Steuern, Personal des öffentlichen Dienstes 2012. Fachserie 14 Reihe 6. Wiesbaden.
- Uttke, Angela (2012): Towards the Future Design and Development of Cities with Built Environment Education. Experiences of Scale, Methods, and Outcomes. In: Procedia – Social and Behavioral Sciences 45 (2012), pp. 3–13.
- Zirbel, Michael (2007): Evaluation von Bebauungsplanprozessen. In: PlanerIn. Nr. 6. Berlin. pp. 31–32.

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The Federal Foundation of Baukultur

Since 2007, the Federal Foundation of Baukultur has promoted Baukultur interests and aimed to anchor the quality of the built environment as an issue of public interest. The foundation advocates good planning and building and acts as an independent interface that consolidates and expands existing networks. It supports and initiates broad debate about the quality of municipal and private building projects and the processes behind them: planning, designing, building, and not least the social relevance of the built environment. This involves making citizens more aware of the importance of Baukultur, arousing their interest, and providing a better appreciation of planning processes and projects. It is important to encourage a dialogue with creators of the built environment from all disciplines, the developers, and the general public – the users – which leads to a better understanding of Baukultur and creates synergies. Architects and project planners are also residents of their cities; all homebuilders are designers of the Baukultur in their streets. The foundation acts as a platform that promotes public conversation about architecture, and with its events, collaborations, and publications, increases awareness of the quality of the built environment.

Why a Baukultur Report?

The Federal Foundation of Baukultur is responsible for presenting a biennial report to the federal cabinet and parliament on the state of Baukultur in Germany. The Baukultur Report 2014/15 is the third report on Baukultur, the first two status reports appearing in 2001 and 2005, and the first under the auspices of the Federal Foundation of Baukultur. In addition to a compact status report on Baukultur in Germany, the Baukultur Report addresses built living spaces of the future with a focus on the city, which is considered in three thematic programme areas: “Mixed Neighbourhoods”, “Public Space and Infrastructure”, “Planning Culture and Process Quality”. It includes the results of expert and focus groups, a municipal survey, and a population survey conducted on behalf of the Federal Foundation. With the Baukultur Report 2014/15, the foundation brings together the positions of designers, planners, residents, users, builders, and developers to raise mutual understanding and social awareness of the quality of Baukultur. It demonstrates possibilities for incorporating Baukultur issues in planning and building practices and derives from them recommendations for action as well as solutions for policy planners and other Baukultur stakeholders.

In addition to having places of interest and official parameters, cities also have a Baukultur identity. Our everyday lives, social coexistence, and moods are positively or negatively affected by the built environment. Thus Baukultur – in addition to social, environmental, and economic implications – also has an emotional and aesthetic dimension. It is a social process of production, appropriation, and use and requires a broad understanding of qualitative values and goals.

What is the state of Baukultur's social value in 2014–15 from the perspective of citizens and creators of Baukultur? How effective is the public sector's role model function? What can and must we do to maintain and improve the quality of life in our cities for future generations? The Baukultur Report 2014/15 gives recommendations for action, and illustrates solutions for policy, planners, and other Baukultur stakeholders.