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Article

Large urban development projects in company towns: The cases of Erlangen (Siemens) and Basel (Novartis)

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Large urban development projects in company towns. The cases of Erlangen (Siemens) and Basel (Novartis)

Dominik Bertram , Tobias Chilla , Marc Pfister

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Abstract

The literature on large-scale urban development projects often primarily addresses drastic failures and their underlying causes. Recently, however, success factors have also received increasing attention. From both perspectives, management approaches, participation logics and political strategies are prominent topics in this context. However, the symbolic dimension of large urban development projects is rarely considered. This is somewhat surprising, as symbolic meaning is considered key to urban development in many contexts. We explore this dimension with two cases of urban entrepreneurial development projects, the Novartis Campus in Basel (Switzerland) and the Siemens Campus in Erlangen (Germany). Our empirical study relies on thematic press analyses. We reflect on the postulate that a “fit” between urban symbolism and societal expectations is a crucial determinant of smooth implementation in large-scale urban development projects in company towns. In both case studies, urban integration, architecture and design are of great relevance. These “soft” factors in

planning and implementation suggest that the outcomes are not solely dependent on technical professionalism. Instead, the appropriate symbolism within the urban context and the associated project investment emerge as critical factors.

Keywords: Large-scale urban development projects ■ Public space ■ Urban campus ■ Newspaper analysis ■ Erlangen ■ Basel

Großprojekte in “Company towns”. Die Fallbeispiele Erlangen (Siemens) und Basel (Novartis)

Zusammenfassung

In der wissenschaftlichen Debatte zu Großprojekten wird ein Schwerpunkt auf die Analyse von Misserfolgen gelegt, wobei die Ursachen hierfür vielfältig sind. In jüngeren Jahren werden zunehmend auch Erfolgsfaktoren in den Blick genommen. Für beide Perspektiven spielen neben Managementfaktoren und Partizipationslogiken politische Strategien eine wichtige Rolle. Die symbolische Dimension großer Stadtentwicklungsprojekte findet dabei bislang wenig Berücksichtigung. Dies ist erstaunlich, da die symbolische Dimension oft als entscheidender Faktor für die Stadtentwicklung angesehen wird. Wir untersuchen zwei Großprojekte der unternehmerischen Stadtentwicklung, des Novartis Campus in Basel (Schweiz) sowie des Siemens Campus in Erlangen (Deutschland). Die empirische Untersuchung basiert auf themenbezogenen Presseanalysen. Die Ergebnisse der Untersuchung legen nahe, dass die „Passung“ zwischen städtischer Symbolik und gesellschaftlichen Erwartungen eine entscheidende Determinante für die reibungslose Umsetzung von Großprojekten in „Company towns“ ist. In beiden Fallbeispielen sind die Aspekte der städtebaulichen Integration sowie des architektonischen Designs von bedeutsamer Relevanz. Diese eher ‚weichen‘ Argumente für die Planung und Umsetzung von Großprojekten demonstrieren, dass die ausschlaggebenden Parameter nicht allein von

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der technischen Professionalität abhängen. Vielmehr erweisen sich eine angemessene Symbolik des städtischen Kontextes und der Investition als wesentliche Größen.

Schlüsselwörter: Städtebauliche Großprojekte ■ Öffentlicher Raum ■ Städtischer Campus ■ Presseanalyse ■ Erlangen ■ Basel

1 Introduction

The growing literature on large-scale urban development and megaprojects focuses particularly on often spectacular failure – timing, budget and media coverage, among others, are sensitive issues during the implementation process (Dziomba/Matuschewski 2007; Gualini/Majoor 2007; Ansar/Flyvbjerg/Budzier et al. 2017). This finding is almost independent of the geographical contexts worldwide (Balke/Reuber/Wood 2018; Denicol/Davies/Krystallis 2020; Juarez Cornelio/Sainati/Locatelli 2021: 779) and the sectoral nature of the project (Dziomba 2009).

In recent years, however, a number of factors for the “not failing” of large-scale urban development projects have come into play. A growing body of literature addresses several technical and organisational debates (Salet 2008; Nanan/Clegg/Mahalingam 2019; Wang/Xu/He et al. 2023). A series of studies explores the definition of success and the potential of a process-oriented framework that takes into account the contingent and dynamic nature of megaprojects (Abdallah/El-Boukri/Florice et al. 2022). We contribute to this discourse with two case studies that combine (a) the particular spatial framework of company towns and (b) the strong relevance of symbolic factors – in addition to economic and social ones (Sanderson 2012). Company towns are a highly relevant spatial context for at least two reasons. First, their relevance for urban development is particularly great, given the high level of dependency (Gibson 1991). Second, and from a more empirical perspective, the somewhat compact structure of actor networks and material patterns allow for rather clear and plausible insights – even if the underlying processes remain multifaceted and incremental (Agrawal/Cockburn/Rosell 2010: 88).

The symbolic dimension of large urban (mega) projects is mainly considered, if at all, from the perspective of failure. In several cases, oversized and iconic design is a key objective, serving the reputation of the initiators rather than the practical use of the project. The Sydney Opera House and the Pentagon complex are devastating examples of megaproject implementation (Gaim/Clegg/Pina e Cunha 2022). However, decades after their construction, they are now perceived as important symbols of the national cul-

ture and politics. Nevertheless, design and symbolism are sensitive issues.

In our paper, we examine this symbolic dimension as a decisive implementation factor. Our research responds to the following question: To what extent are symbolic factors relevant to the implementation of large urban development projects in company towns? Our operationalisation relies on a retrospective thematic newspaper analysis. Using two large-scale entrepreneurial projects of urban development, we reflect on the argument that a “fit” between the symbolic dimension and societal expectations is key for implementation. Our examples show that aesthetics in a broader sense and open public access play an important role in project development and implementation. More specifically, we show that architecture can serve as an “appeasement” argument, and we illustrate that the degree of accessibility of open spaces is amongst the most sensitive topics influencing public acceptance.

This argument does not question other prominent findings, such as the relevance of modularisation in planning and the various “biases” in early planning stages. It does, however, add a “softer” dimension to the discourse on the planning and implementation processes of large-scale urban development projects. We reflect on the postulate that a “fit” between urban symbolism and societal expectations is an important key to smooth implementation of urban projects in company towns and beyond.

2 Conceptual framework

2.1 Large-scale urban development in small company towns: size as a problem?

The literature on large-scale urban development projects consistently demonstrates a correlation between project size and the incidence of various complications. Specifically, larger projects are more vulnerable to issues such as budget overruns, planning conflicts and timing challenges. This phenomenon has led to the characterisation of project size as problematic, highlighted in the chapter title “Big is fragile” by Ansar/Flyvbjerg/Budzier et al. (2017). The spectrum of large project types is extensive, ranging from the development of new city districts to the organisation of major events and the construction of motorway tunnels. Dziomba (2009) delineates four established categories of large-scale urban projects: major events, flagship image projects, large-scale infrastructure projects and urban transformation initiatives. However, clear categorisation may not always be feasible, as hybrid forms often emerge (Huning/Peters 2003).

Some urban development projects are large in a material, physical sense, as exemplified by rail infrastructure.

Others, such as major festivalisation projects, are less tangible. Despite the inherent differences in the nature of these large (urban) projects, they often exhibit similar challenges, including conflicts, overspending and budgeting, resulting from planning issues.

The reasons for these problems are manifold. In many cases, the actors are overstretched and struggle to cope with the complexity and scale of their tasks. These challenges can stem from technical factors, such as the novelty of the tasks at hand, but also from organisational issues and “exceptional urbanism”, as Hesse (2013: 25) illustrates for the Grand Duchy of Luxembourg. Frequently, initiators of large-scale urban development projects deliberately underestimate the necessary budgets and project complexities to gain political support, a phenomenon known as strategic bias (Flyvbjerg/Holm/Buhl 2002, Flyvbjerg 2021a).

The specific governance structures associated with large projects can inherently restrict the capabilities of local authorities, thereby hindering their ability to protect the public good in public-private negotiations and preventing them from fulfilling their essential purpose (Adam/Fuchs 2012: 570; Leick/Hesse/Becker 2020: 262). However, the legitimisation of such projects often occurs retrospectively, contingent upon their success (Dziomba 2009: 2).

Furthermore, the privatisation of public space and the lack of participation in planning procedures have been subjects of critical discourse. The issue of public spaces is particularly prominent (Bodnar 2015; Fleury/Gomes 2024). Recent academic discussions also emphasise positive and pragmatic aspects of private engagement in public spaces, suggesting that such involvement may enhance the quality of these areas as well as the balance between economic growth and environmental sustainability (Bauriedl 2007; Carmona 2015; Lee/Scholten 2022).

A growing body of literature examines the success factors associated with large projects (e.g. no major delays, no budget overruns, public acceptance). This literature suggests that making projects “more modular” could enhance their effectiveness (Flyvbjerg 2021b). Additionally, an increasing number of studies focus on various technical and organisational aspects of project management (Wang/Xu/He et al. 2023). Other research adopts a qualitative approach, exploring the definition of success and how a process-oriented governance framework that takes into account the contingent and dynamic nature of large urban projects can be applied (Abdallah/El-Boukri/Florice et al. 2022), for example as a “city within the city” (Leick/Hesse/Becker 2020: 249).

Our paper contributes to this discourse by investigating the role of the symbolic dimension in large-scale urban development projects within small company towns, a topic that has not yet been systematically addressed. When large

companies are established in relatively small towns or cities, the functional settings and governance structures tend to be quite specific. The debate on company towns particularly highlights economic vulnerability during periods of crisis and transformation (Commander 2018). Conversely, the high levels of compensation and generally favourable service provision are often noted as advantages. Additionally, from an entrepreneurial perspective, high employee loyalty and a strong local identity are frequently cited as a significant asset in company towns (Mooresirust/Brown 2021). Historically, company towns have been associated with sectors such as mining and production. Although the production sector remains dominant today, its relevance has expanded to encompass a considerable focus on research and development (R&D) and innovation. Notable examples of this trend can be seen in the automotive and chemical sectors, particularly in cities like Wolfsburg and Ludwigshafen (Berlemann/Jahn 2016, Kiese 2016).

The cases examined in this study, the Siemens Campus in Erlangen and the Novartis Campus in Basel, are examples of large-scale urban development projects situated in relatively small company towns. Both cases are rooted in the production sector – pharmaceutical products in Basel, electric systems and industrial automation in Erlangen. However, both investments prioritise research and development facilities over production infrastructure.

The location of research and development activities is seen as a primary driver of urban development (Edvardsson/Yigitcanlar/Pancholi 2016). This is influenced by local agglomeration effects, the specific labour market and reputational factors associated with these locations. Basel hosts, alongside Roche, the Novartis headquarters, whereas Erlangen has the largest Siemens facility, despite the company’s headquarters being located in Munich. Interestingly, these cases incorporate the term “campus”. Traditionally, university and college campuses have been viewed as essential components of knowledge production and the development of knowledge cities. In recent years, the concept of a campus has extended into entrepreneurial contexts, often intersecting with academic institutions (Romme 2017). This notion is increasingly recognised as a relevant element of entrepreneurial ecosystems (Zoller/Boutellier 2013).

2.2 The symbolic dimension of urban development projects

Large-scale urban development projects possess a symbolic and discursive dimension. They have the potential to fundamentally alter the identity and reputation of a place, while also holding symbolic relevance for a broader spatial context (Rego/Reis Irigaray/Chaves 2017: 18). Florice/Brunet (2023: 9) describe symbolism in relation to the emotions,

meanings and representations associated with a project. Their work illustrates how large (mega) projects can resonate deeply within nations or regions, a phenomenon they term “iconic agitation symbolism”, or evoke emotions such as aesthetic pleasure, which they refer to as “spectacular appeal symbolism”. Moreover, large urban development projects are frequently regarded as “flagship” projects and are discussed in terms of their catalytic function for development at the national or regional level (Zeković/Maričić 2022: 529). Adam/Fuchs (2012: 565) identify “orchestration” as a central feature of contemporary urban projects, such as the Elbe Philharmonic Hall as the flagship of Hamburg’s Hafencity, or Potsdamer Platz in Berlin with a number of prestigious architectural features.

The interplay of architectural aesthetics and planning culture plays a crucial role in shaping specific city branding and the implementation process (Aydoghmish/Rafieian 2022). Balke/Reuber/Wood (2018: 1009) investigated the Hamburg Elbe Philharmonic Hall case and showed “how iconic architectural models and highly aestheticised discourses on architectural particularisation helped to enable a consensual (rather than conflictive) style of political decision-making”. This process encompasses various scales, ranging from local building blocks and city-regional functioning to the global embeddedness of transnational corporate (TNC) investors. The allocation of value capture resulting from large (mega) project investments can vary significantly across multi-level systems (Zukin 2011; van Marrewijk 2017: 57). Large urban projects are meeting points of multi-scalar actors, discourses and relationships. Their symbolism may refer to local architectural styles or to broader international prestige. In this process of developing a common understanding and identity elements, the incorporation of “playful” and artistic components holds significant potential (Buchmuller/Keller/Koch et al. 2000: 59). For example, access to large-scale urban development projects can be restricted to privileged groups associated with a global company, or it can be entirely open to all urban dwellers.

Through two empirical case studies, our paper contributes to a deeper understanding of the symbolic dimension as a critical factor in the implementation processes of large entrepreneurial projects. We focus on an essential success factor for large-scale urban development projects: the premise that a “fit” between urban symbolism and societal expectations is key to ensuring smooth implementation.

3 Methodology

3.1 Positioning the case studies: small company towns

Our paper adopts a two-case study approach. The basis of this approach is to select two cases that are highly comparable, allowing methodological comparison. By applying this comparative framework, it is possible to identify plausible patterns and variations that may be applicable across multiple instances of similar phenomena (Bartlett/Vavrus 2017).

In Erlangen, Germany, a new, open urban district is currently being developed on the former Siemens production site, south of the city centre. This campus project includes office infrastructure, green and open spaces, restaurants, shops and various service facilities. Similarly, the Novartis Campus in Basel, Switzerland, serves as the global headquarters of Novartis and as a centre for research, development and management. This site also includes office and laboratory facilities, accompanied by green spaces, restaurants and retail services. Both case studies host and represent significant global players with political and economic relevance in the context of local urban development.

Table 1 provides a comparative overview of the two campus projects. While both implementation processes are ongoing, the Basel case began earlier, and its construction phase has already largely been completed in line with current requirements. In both the Siemens/Erlangen and Novartis/Basel cases, there have been no budget overruns, delays or protest campaigning (so far). Consequently, the new urban districts have been developed largely as planned and have now become integral parts of the urban landscape following relatively smooth implementation processes. The absence of cost overruns and planning conflicts contrasts with typical findings in the literature on large-scale urban development projects.

The Siemens Campus is approximately twice the size of

Table 1 Comparative overview of both case studies

Urban project	Siemens Campus	Novartis Campus
City Population	Erlangen: 116,562 (2023)	Basel: 196,786 (2023)
Project timing	start in 2014, completion foreseen 2030	start in 2002, completion 2023
Area	54 hectares	20 hectares
Investment	approximately one billion euros	approximately two billion Swiss francs
Work places	approximately 20,000	approximately 10,000

Source: the authors; data from Eurostat and homepages of Siemens and Novartis

the Novartis Campus and is expected to offer around twice as many jobs upon completion. In contrast, the Novartis Campus represents a significantly larger financial investment, particularly due to its ambitious architectural goals. Both campus projects are easily accessible by public transport from the main train stations in Erlangen and Basel, and both provide direct access to the nearest major roads.

The significance of these large companies as employers and sources of prosperity are crucial characteristics of both projects. The Siemens Campus is notable not only for its size but also for the transformation of a previously closed company site into a new urban district with a distinct urban character, which is likely to foster new functional connections and patterns (Chilla/Heugel/Sielker et al. 2020: 65). In Basel, the Swiss pharmaceutical company Novartis is transforming its Basel St. Johann site from an industrial area into a campus designed to promote knowledge exchange and innovation. This transformation involves the new construction of several buildings by some of the world's leading architects and firms, including Vittorio Lampugnani (master plan), Frank Gehry, Tadao Ando, Rahul Mehrotra and Diener & Diener. Concurrently, outdoor spaces are being created to provide areas for walking and social interaction (Dick/Degenhardt/Schulze et al. 2015: 107). In both cases, these companies have significantly influenced the mentalities and governance structures within their respective cities (for Erlangen: Büttner 2009: 135, for Basel: Haab/Luterbach/Heimann 2013: 262). The long-standing reputation of these large companies is also an important condition for the smooth implementation of large-scale urban development projects, as it tends to foster a high level of trust and openness among stakeholders (Moonesirust/Brown 2021). Historically, both sites were important production sites for their companies, but have since undergone complete restructuring to serve research and development activities, as well as management and administrative functions. Additionally, both campuses, previously closed to the public, are now to some extent publicly accessible. The architectural designs are further enhanced by the incorporation of artistic elements throughout the campuses.

From a methodological perspective, assessing the construction phase of the Siemens Campus Erlangen is challenging, as it is not yet fully completed. Therefore, the assertion that both projects have undergone smooth implementation processes has to be regarded with caution. Nonetheless, both campuses are fully operational and, even in Erlangen, the majority of construction modules have already been completed.

3.2 Data collection

We operationalise our research objective by means of a retrospective media-analysis. This methodological approach allows the cases to be considered comparatively despite the different spatial and temporal processes in Erlangen and Basel. Moreover, media coverage reflects in particular conflicts of broader interest, as is made clear in disputed cases like Stuttgart 21 or others (Nagel/Satoh 2019). The media corpus obviously comes along with limitations. In particular, the governance of large projects is characterised by a tendency towards confidentiality, with small groups making important decisions that are not reported in the media. The speakers and their roles in the urban projects should be examined critically, as the press typically references “scripted” statements issued by actors in politics, city management or at company level. Nevertheless, as soon as controversies lead to changes in fundamental planning ideas and implementation plans, the media tends to cover this, including the public debates surrounding them.

In technical terms, the analysis is based on the extraction of newspaper articles related to large-scale urban development projects. The data extraction process utilises the WISO literature database,¹ which is a comprehensive online resource containing approximately 260 million articles from various daily and weekly publications. Moreover, an additional newspaper archive, *Süddeutsche Zeitung*, was incorporated to ensure coverage of the most relevant sources in the studied regions.

The first objective of this data collection process is to determine the quantity of articles and explore the spatio-temporal distribution of press coverage focusing the Siemens Campus in Erlangen and the Novartis Campus in Basel. The extraction process included a systematic keyword search within the WISO database, executed through Elasticsearch. This advanced search mechanism employs composite decomposition and stemming techniques to identify similar documents without altering the user's query. The operator to link search terms is “AND”, ensuring that the resulting documents contain both specified search terms. Two main searches are conducted: “Novartis Campus AND Basel” and “Siemens Campus AND Erlangen”. The observation period for Novartis spans from 2001 to 2022, while Siemens is covered from 2013 to 2022, capturing the main campus implementation periods. The starting point for each project is determined by identifying the first relevant publication. The data retrieval encompasses press articles from various geographical locations, including Switzerland, Austria,

¹ <https://wiso-net.de/> (05.04.2025).

Germany and international sources. However, articles from news agencies are excluded to prevent duplication.

An important step of the data collection process is the manual review and organisation of all search results. This process includes the removal of duplicate articles, particularly in cases where an article has been published in both print and online formats. Such an approach is essential for accurately mapping the locations where reporting has been conducted.

3.3 Data processing and analysis

We employ a two-step approach for data processing and analysis. First, we utilise a categorisation process to organise the newspaper articles. This approach allows a spatio-temporal analysis of press coverage concerning the two Campus projects. The categorisation involves systematically sorting articles based on several key criteria. This process records the newspaper name, publication year and publication location assigned to a NUTS 3 regional code and categorises newspaper distribution as either “supra-regional” or “regional”. Subsequently, these details are compiled into press article timelines for each campus project. These timelines serve as dynamic visual representations illustrating essential developmental milestones throughout the various construction phases, alongside a quantitative evaluation of regional and supra-regional press coverage.

Figure 1 provides further details regarding the corpus of the study. A total of 530 articles related to the Siemens Campus were collated and analysed for the period from 2013 to 2022. Of these, 478 appeared in regional newspapers, while 52 were published in supra-regional outlets. In contrast, the Basel case exhibits a much larger volume of press reporting, comprising 3046 articles within the database. This

discrepancy is partly attributable to the extended reporting period of the Novartis Campus project (2001-2022), which includes 2770 articles from regional newspapers and 276 from supra-regional newspapers.

This spatial data processing also involves importing the categorised newspaper articles into a Geographic Information System. The resultant dataset reflects the total number of published articles per year and per region (NUTS 3). This spatio-temporal analysis generates a comprehensive overview of press coverage trends, enabling a nuanced understanding of how media visibility evolves over time and across different regions. The spatial perspective is a significant dimension in research on discourses (Bauriedl 2009: 228). Our hypothesis postulates that conflicts in urban development projects correlate with the reach of press articles, specifically, the more regional the discourse, the less conflictual the surrounding debate tends to be.

The second step of data processing involves a retrospective newspaper analysis aimed at examining differences and similarities in the thematic reporting of the two case studies. In this phase, all relevant articles are aggregated into two comprehensive text corpora (Siemens Campus and Novartis Campus). Subsequently, an inductive-deductive hybrid thematic analysis is employed to identify pertinent topics and content within the newspaper coverage (Proudfoot 2023). This mixed methods approach offers a systematic overview of the text corpus by using a qualitative framework combining both inductive and deductive reasoning (Tjora 2018).

This process applies a multi-person principle, whereby three experts independently conducted searches to ensure inter-rater reliability (Boyatzis 1998). The initial phase employs an inductive (bottom-up) thematic analysis following the methodology established by Braun/Clarke (2006). This entails familiarisation with the data, generation of initial

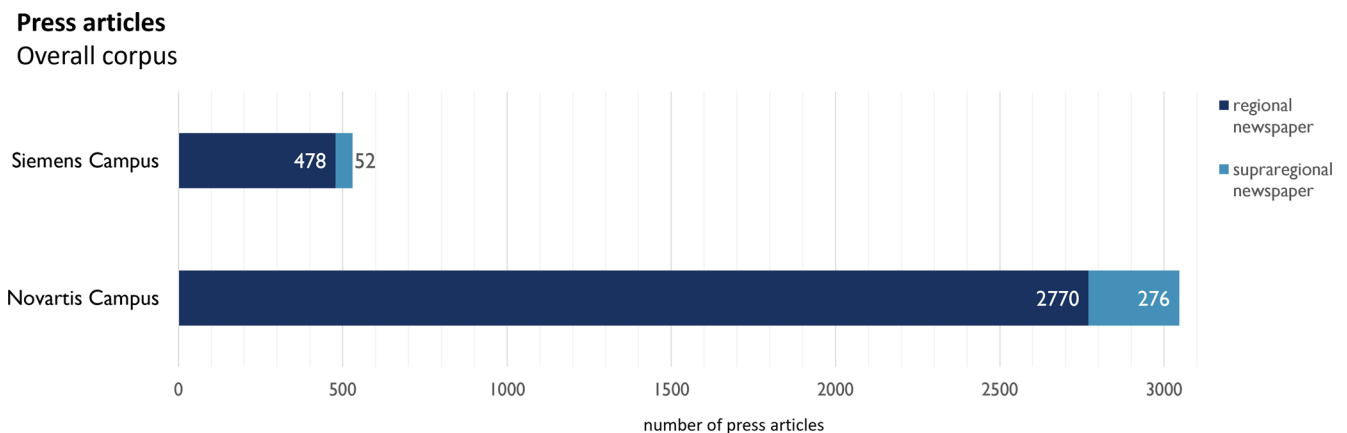


Figure 1 Overall number of press articles of regional and supra-regional newspapers referring to the Siemens and Novartis Campuses
Siemens Campus timeframe: 2013-2022; Novartis Campus timeframe: 2001-2022

codes, searching for themes, reviewing themes and defining themes. In this context, an open thematic coding approach is utilised (Matissek/Pfaffenbach/Reuber 2013: 201). After defining the themes, a deductive (top-down) thematic analysis is implemented to gain a deeper understanding of the themes identified in the inductive phase.

Based on this inductive-deductive framework, the systematic search resulted in topics considered to be explanatory factors for the rather smooth implementation. While these components are derived from a deductive perspective, our operationalisation primarily retained an inductive character to avoid bias in the results of the study:

The involvement of specific actors in the media debate on large urban projects is of great interest for understanding the role of public and private actors in the project governance. Our review of newspaper articles identifies the complex network of actors involved, reflecting on their press statements. We conducted an explicit search for prominent figures, including the names of influential regional and supra-regional figures in Erlangen (Siemens) and Basel (Novartis).

The conflict aspect, characterised by disputes over financing, timing and public acceptance, is frequently addressed in the literature on large urban projects. Our research identifies conflicts within the campus projects in Erlangen and Basel, using operators such as “expensive”, “relocation”, “corona”, “conflict”, “protest” and “job cuts”.

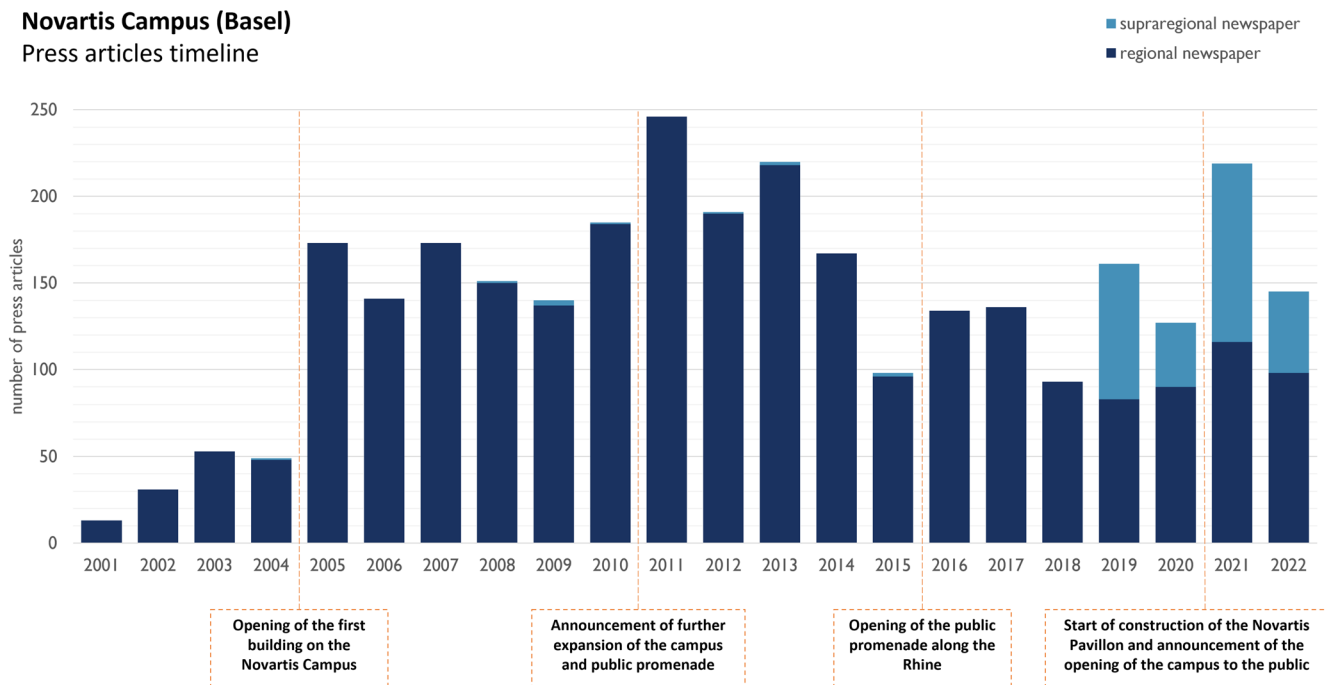
The smooth implementation of a large urban project correlates with its *integration into the urban context*. As both projects were initially production sites with restricted access, we investigate the relevance of “openness” in terms of public accessibility. The analysis of urban integration is discussed in a differentiated way, as newspaper articles do not directly assess the actual public accessibility of the projects but rather the discourse surrounding it. Our search operators included terms such as “accessible”, “fence”, “fenced”, “closed”, “open” and “public”.

Architecture plays a prominent role in both projects. We conducted an explicit search for architectural descriptions in the press corpora using search operators such as “architecture”, “buildings” and “construction”. This process enabled us to extract adjectives that describe the architectural features of the campuses.

4 Results

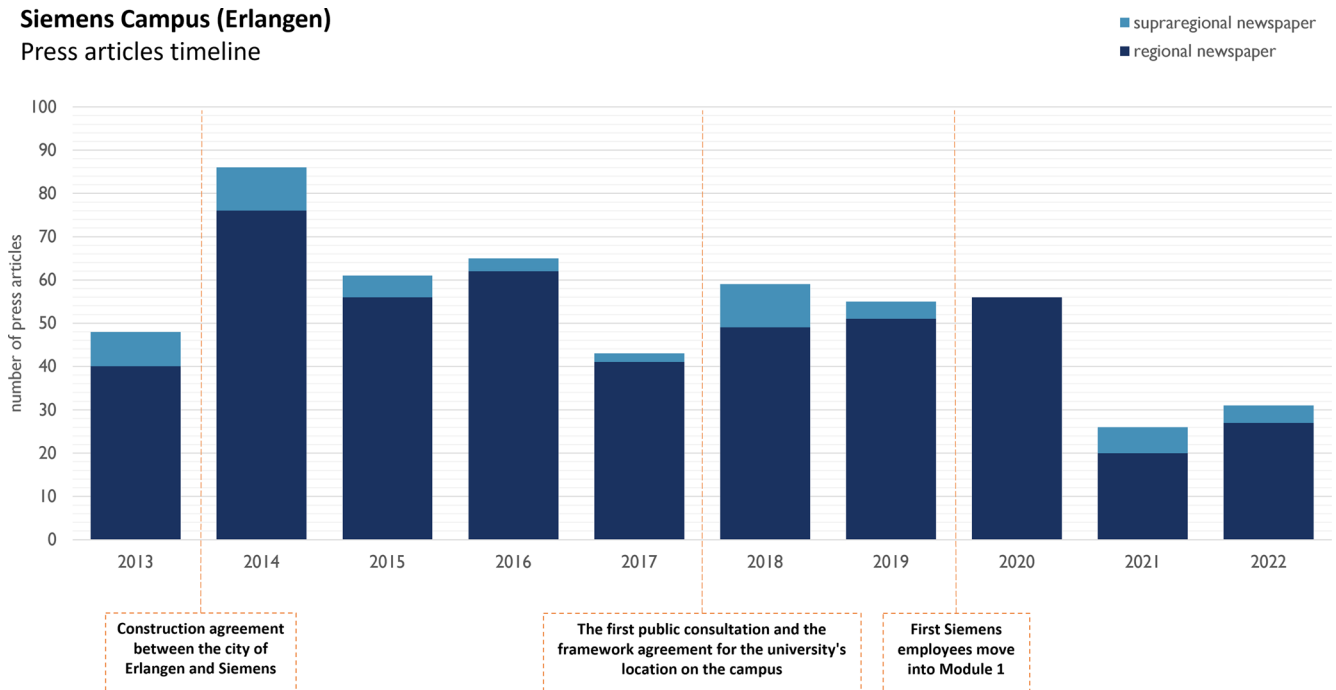
4.1 Timelines of press articles

Figure 2 illustrates the number of newspaper articles published on the Novartis Campus from 2001 to 2022. The dark blue bars represent articles from regional newspapers, while the light blue bars denote supra-regional publications. The



Concept and design: Bertram, D., Chilla, T., Pfister, M., Vogel, N. & T. Wein, 2025; Origin of data: WISO database, Süddeutsche Zeitung archive, 2023.

Figure 2 Timeline of press articles on the Novartis Campus in Basel



Concept and design: Bertram, D., Chilla, T., Pfister, M., Vogel, N. & T. Wein, 2025; Origin of data: WISO database, Süddeutsche Zeitung archive, 2023.

Figure 3 Press articles timeline of the Siemens Campus in Erlangen

volume of media coverage can be linked to key implementation activities, which can be categorised into four phases: (1) in 2005, the first building on the campus was opened; (2) in 2011, the expansion of the campus and a public promenade were announced; (3) in 2016, the Rhine promenade officially opened, and (4) in 2021, the construction of the Novartis Pavillon began and it was announced that the campus would be made more accessible to the public. Since October 2022, the outdoor area and certain premises, such as restaurants, cafés and bars, are accessible during business hours (Pavillon also at the weekend).

Figure 2 shows a significant increase in public interest following the opening of the first building in 2005. However, reporting was mainly restricted to regional newspapers. The volume of newspaper articles published remained high until 2011, when it peaked within the time series. Following the announcement of the Rhine promenade, which is accessible to the public, media interest in the campus project increased again. Subsequently, the number of newspaper articles decreased continuously until 2015, with a brief increase after the opening of the Rhine promenade.

The Rhine promenade, located on the site of the former dockyard, serves as a central route for Basel, linking the city with Huningue (France) and, via the Dreiländerbrücke, with the German city of Weil and its shopping centre. This project, which includes a cycle path for com-

muters and a public restaurant on the Novartis site, was part of the International Building Exhibition Basel (2010–2020). In 2019, media attention towards the Novartis Campus increased significantly again due to the announcement of the architecturally prestigious Novartis Pavillon, which was also covered by national and international newspapers. This heightened level of media attention continued until completion of the Novartis Campus.

Figure 3 illustrates the press reporting on the Siemens Campus in Erlangen. The most significant development phases of this project include the construction agreement between the city of Erlangen and Siemens in 2014, the framework agreement for university buildings on the campus in 2018 and the relocation of the first Siemens employees to the campus in 2020. In comparison to the coverage of the Novartis Campus, the graph indicates a relatively low number of newspaper articles regarding the Siemens Campus. While the Novartis Campus consistently generated over 100 articles every year following the opening of its first building, the Siemens Campus did not reach this number in its first ten years. The peak volume of newspaper articles related to the Siemens Campus occurred immediately after the construction agreement. After this peak, media attention remained at a rather low level, predominately in regional newspapers. In contrast to the reporting on the Novartis Campus, the timeline for the Siemens Campus shows

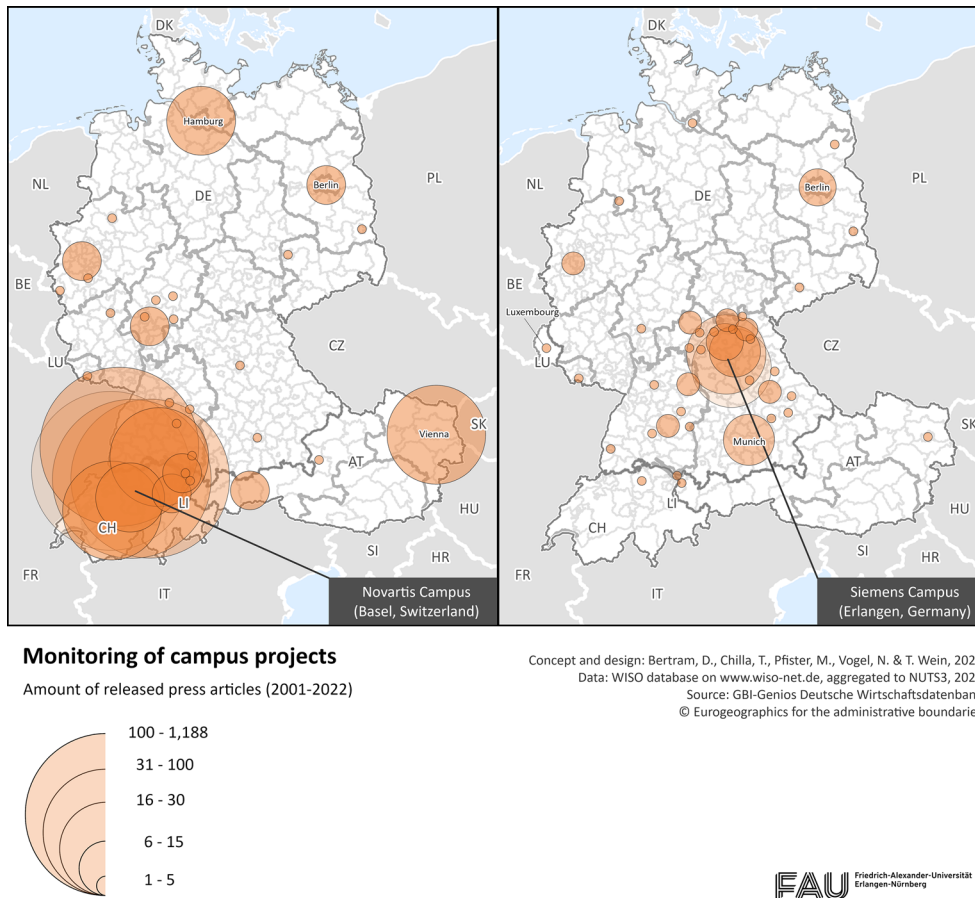


Figure 4 Spatial distribution of newspaper articles about the Novartis Campus in Basel and the Siemens Campus in Erlangen (head offices of newspapers)

significant disruption due to the COVID-19 pandemic. The number of newspaper articles decreased markedly in 2021 and had not returned to the initial level recorded in 2020 by 2022.

4.2 Spatial distribution of newspaper reporting

Figure 4 illustrates the spatial distribution of the press coverage related to the two campus projects. The bubbles represent the respective locations of the newspapers that reported on the Novartis Campus in Basel and the Siemens Campus in Erlangen. The size of each bubble corresponds to the number of articles published by newspapers based in that location. The map on the left depicts the coverage of the Novartis Campus from 2001 to 2022, whereas the map on the right highlights the Siemens Campus reporting from 2013 to 2022.

Both campus projects are covered exclusively by newspapers located in Switzerland, Germany and Austria, including some reporting on the Siemens Campus from Luxem-

bourg. Coverage of the Novartis Campus primarily consists of regional and cross-border reporting, particularly in the border triangle of Switzerland, Germany and Austria. Although some articles originate from more distant locations, they are fewer in number. Additionally, supra-regional newspapers in Vienna, Berlin and Hamburg also report on the Novartis Campus. In contrast, coverage of the Siemens Campus is predominately regional and national, with limited international articles. The Siemens Campus is of particular interest within the immediate vicinity of Erlangen, notably in Nuremberg, Herzogenaurach and Fürth, as well as other parts of Bavaria and in Baden-Württemberg. Overall, the geographical distribution of articles is mainly of regional scale in both cases, even if the Novartis Campus receives more international attention than the Siemens Campus. This rather regional character of media reporting can be seen as indicating low levels of conflict. Furthermore, the debates surrounding both campus projects appear to be predominately of functional character. For instance, the Erlangen project addresses the redistribution of jobs within the region, a topic of primary interest for regional press coverage.

In the Basel case, the involvement of internationally well-known architects and firms in the redesign helps to explain the higher volume of newspaper articles at the international level.

4.3 Press narratives of large-scale urban development projects

4.3.1 The speakers and their roles

The analysis of newspaper data shows the main speakers and their prominence, incorporating the local, regional and international levels. The press analysis indicates that local actors, particularly those from Erlangen, exhibit a predominantly positive attitude toward the Siemens Campus. Prominent figures, including both the current and former mayor of Erlangen, as well as decision-makers within the city administration, publicly support the project. Conversely, actors from the neighbouring city of Nuremberg express reservations, mainly due to Siemens reducing its presence in Nuremberg (*In Erlangen, about 20 kilometres from Nuremberg, the electronics giant [Siemens] is building a new campus where several units will be consolidated. Nuremberg's mayor Ulrich Maly (SPD) emphasised that the news of the relocation to Erlangen was "bad news"*, published in 2016 in *Coburger Tageblatt, Saale Zeitung, Bayerische Rundschau, Fränkischer Tag*, authors' translation). This relocation raises economic concerns for the city representatives.

This local context is linked to the University of Erlangen, particularly regarding the repurposing of former Siemens buildings in the city centre. Additionally, representatives involved in a city-region tram project are prominently featured in the media coverage related to the Siemens Campus. This tramway project, which aims to connect Erlangen with Nuremberg and Herzogenaurach (headquarters of Adidas and Puma), is referred to as crucial in addressing the evolving transportation needs associated with the campus project.

The public speakers on the Siemens Campus project involve key players at both the regional political and corporate levels. High-ranking figures, such as Bavaria's Minister-President Markus Söder, additional Bavarian Ministers and Siemens executives Joe Kaeser and his successor Roland Busch, are highly visible in newspaper reporting. Media statements from these political and corporate leaders are closely aligned, reflecting a high level of regional and local political consensus on the project. The following examples illustrate this alignment, demonstrating how press statements from regional political and entrepreneurial figures describe the urban campus project in Erlangen: *"The atmosphere is almost like in Hollywood. The old lady has turned into a hot lad"*, praised Minister President Markus Söder (CSU), who was enthusiastic about the inspiring at-

mosphere in the new "Siemens City" in the south of the Franconian university town. With Siemens at its side, Bavaria is ideally positioned for the future. "We will do everything in our power to ensure that Siemens continues to feel at home in Bavaria", published in 2022 in *Mittelbayerische Zeitung*, authors' translation.

This is how Siemens CEO Roland Busch describes the development in Erlangen: *"The Siemens Erlangen Campus is becoming a driving force for the entire metropolitan region [Nuremberg]. In our research laboratory, we are working together with partners on solutions for the energy transition. In this way, we are supporting our customers on their way to a more sustainable future"*, published in 2022 in *Nürnberger Zeitung*, authors' translation.

Media reporting on the Novartis Campus predominately features speakers at the cooperate level. In contrast to the Erlangen case, reporting on the Novartis Campus is primarily driven by corporate representatives. In this context, the regional debate is shaped by the international perspectives and goals of the company (*Basel is the global headquarters of the company, has been for decades and will most likely remain so. Novartis still conducts an important part of its research and development in Basel, and this will not change. "We have built a number of research buildings in Basel. Now we want to use the infrastructure"*, says Reinhardt. *These clear statements distinguish him from his predecessor Daniel Vasella, who a few years ago did not rule out a partial move away from Basel*, published in 2015 in *Aargauer Zeitung*, authors' translation). The role of local political and city-administrative actors appears to be less prominent and displays a predominantly positive attitude towards the company in general and the campus project in particular (*Novartis knows that its ambitious campus project in the St. Johannis quarter will not meet with any resistance from a red-green government. Such urban development projects are interesting*, published in 2005 in *Tagesanzeiger*, authors' translation). From 2019 on, the media articles reflect the Novartis press strategy that focuses on internationally renowned architects, including David Chipperfield, Frank Gehry, Diener & Diener, Vittorio Lampugnani, Adolf Krischanitz, Peter Märkli, Rafael Moneo, Sanaa and Yoshio Taniguchi. This approach attracts supra-regional and international media attention while effectively communicating a positive image for the campus project.

4.3.2 Local controversies instead of large conflicts

In Erlangen, the media coverage of the Siemens Campus is relatively calm and stable. Newspapers reported some minor controversies at the beginning of the project, but these did not escalate into major conflicts. These initial issues were characterised by tensions between the city of Erlangen and Siemens, particularly regarding the long-term implications

of the investment. During discussions around the framework agreement, diverse press statements emerged, ranging from optimism about the campus as a representation of long-term investment in Erlangen to scepticism (*There are trade unionists who interpret this investment as “part of a strategy” to cover up planned job cuts: “Who says that those who move away from the city centre will also arrive in the south?”*, published in 2014 in *Süddeutsche Zeitung*, authors’ translation). There were local concerns that the project might serve as a cover for impending job cuts. Siemens’ decision to relocate approximately 8,000 jobs from Nuremberg to Erlangen resonated beyond the company, provoking significant reactions in the city of Nuremberg. The job relocations were described as a *painful shock* for Nuremberg (published in 2016 in *Nürnberger Nachrichten*, *Nürnberger Zeitung*, authors’ translation) and raised immediate economic concerns for the local administration. Although representatives in Nuremberg did not openly oppose the decision, the closure of established Siemens sites in favour of Erlangen generated some dissatisfaction. This included debates on longer commuting distances from Nuremberg to the new campus in Erlangen and heightened pressure on existing infrastructure.

In addition to the labour market dimension, the press analysis revealed debates regarding the attractiveness of the Erlangen city centre and its impact on the northern city area. The concentration of Siemens workplaces in the southern part of the city, jobs that were previously scattered across the central area, is frequently discussed in newspaper articles. Concerns were raised about alterations in traffic flows and the overall character of the city. Specific controversies emerged regarding urban transformation and the shift of central functions from the city centre to the south of Erlangen (*We also need to think about how to make the city centre/old city more attractive, so that the northern part of the city is not left behind – especially if there is a shift to the south of the city as a result of the Siemens Campus project*, published in 2017 in *Nürnberger Nachrichten*, *Nürnberger Zeitung*, authors’ translation). The debate focuses on the potential decline in visitor numbers in the city centre as jobs and students “migrate” south, posing challenges for local businesses, such as the local shopping mall. Concerns were also raised about the risk of large numbers of building vacancies. Additionally, the loss of lunchtime purchasing power of several thousand Siemens employees was addressed as an issue for shopping and restaurant locations (*There will be a relocation of inner-city functions. The relocation of thousands of employees and hundreds of students to the south will change traffic flows, pedestrian and bicycle routes in the city*, published in 2019 in *Fränkischer Tag*, authors’ translation).

The development of the Novartis Campus in Basel sparked controversies related to public space utilisation and corporate commitments. The compiled newspaper articles reveal a controversial debate on the privatisation of public space adjacent to the Novartis Campus, including the cession of a public road (*The privatisation of public land is in full progress, also in Basel. The Novartis campus is closed and private. It seems bizarre that a company closes a part of the city and declares that it is no longer open to the public*, published in 2013 in *Aargauer Zeitung*, authors’ translation). The limited access to the campus site, due to the installation of a fence, led to considerable criticism. This critique relates to discussions about corporate gated communities that fundamentally challenge urban quality. Protests by opposition parties within the Basel city government illustrate discontent arising from the perceived imbalance between private and public interests in the campus planning process. At the opening of the Novartis Pavillon, protesters aimed to voice their opposition to Novartis’s acquisition of what they termed *half the city’s land* (published in 2022 in *Basler Zeitung*, authors’ translation) and to raise concerns about the loss of affordable residential space (*The Basel government has capitulated to the privatisation ideology, and the city council confirmed this by approving the “deal” with Novartis. The word “deal” always brings with it a hint of shady, non-transparent corporate affairs. And that’s exactly what it is, a bluff package carefully constructed over years. Public space is being lost*, published in 2006 in *Basler Zeitung*, authors’ translation).

Similar to the debates surrounding the Siemens Campus, controversies also emerged in Basel regarding employment dynamics and corporate commitments in relation to the Novartis Campus. Local initiatives responded to announcements of job cuts, highlighting contradictions with previous commitments made by Novartis. This debate was further intensified by the company’s implementation of cost-cutting measures, including the transfer of approximately 700 Novartis jobs abroad by 2022. Specifically, the discussion focuses on the role of the Novartis Campus in the company’s broader strategies and its overall responsibility for urban development in Basel.

4.3.3 Urban integration as a game changer?

It is striking that for both campus projects, urban integration is a core theme of the newspaper reporting. This fits very closely with the debate in academic literature on large urban development projects. We analysed the compiled press articles for narratives on openness with several search operators, and the results differ in the two cases.

A prominent aspect of the Erlangen case is the removal of physical barriers that isolated the southern Siemens site before the campus project started. As part of this effort, the

old fences along the production site were removed, symbolising the transition from a closed industrial space to an open and accessible urban district (*With the Siemens campus, the fences that for decades isolated the southern site from the public are falling down*, published in 2016 in *Nürnberger Nachrichten*, authors' translation). The announcement of the Siemens Campus development prompted many local and regional newspapers to report that the Siemens Campus would be open not only to Siemens employees, but also to the public and other companies. This urban integration also extends to non-Siemens institutions such as the Fraunhofer Institute and the University of Erlangen-Nuremberg. The media reporting perceives the removal of the fences not only as a physical gesture, but also as Siemens' commitment to developing a permeable and accessible urban district in cooperation with the city of Erlangen (*The [Siemens] campus will be a fully open urban district in Erlangen*, published in 2019 in *Süddeutsche Zeitung*, authors' translation). The dominant narrative of the coverage describes a new district where people will not only work; there are press reports about new residential areas, green spaces, retail shops, restaurants, cafés and services. The development includes a new network of pedestrian and bicycle paths that will connect different parts of the campus and support urban integration. This explicitly communicated transition from a previously closed and inaccessible production facility to an open urban research and development district represents a paradigm shift in Siemens' role in Erlangen's urban development (*On the Siemens research site in the south of the city, which has not been open to the public until now, modern office, research and laboratory workplaces are to be created in an urban environment, as well as a new residential quarter in later construction phases. Attractive green and open spaces, local shops and restaurants are also planned*, published in 2015 in *Fränkischer Tag*, authors' translation).

In Basel, the debate navigates through different stages of urban integration: from cooperate-private space to challenges concerning controlled access and the transformation to a more "open" campus. A starting point of the narrative revolves around Novartis' statement that the campus will not function as a public recreational space. This statement was not in line with the city's vision of creating public spaces along the banks of the River Rhine. Novartis initially described the audience of the campus as its own employees, which initiated a public debate about a gated community (*Novartis considers the public to be, first and foremost, its own employees: The campus will be accessible only to employees and visitors. The park that Novartis is planning behind the Voltamatte on the banks of the Rhine will also be separated from the rest of the public and will not be accessible. The "campus" will become a city within a city in a green setting*, published in 2003 in *Basler Zeitung*, au-

thors' translation). The balance between public access and cooperate security concerns is another crucial dimension of the reporting. Due to heightened public interest in the campus project, the company offers guided tours for the public. Security issues limit public architectural tours and visits to the company site to just a few per month. In 2022, the staff restaurant was combined with a public cafeteria. However, the company fears security risks may arise from interweaving the corporate campus with the public space (*The 20-hectare site of the Novartis Campus has been open to the public for almost two years: guided tours are organised every second Saturday via Basel Tourism and are very well booked. Around 80,000 locals and foreigners take the opportunity to visit the site every year*, published in 2012 in *Basler Zeitung*, authors' translation). The debate therefore shows a shift towards more urban integration. The peak of this development can be seen in 2022, when many newspapers reported that the entire campus would be open to the public during the day. However, this planned opening required strict security measures. We observe that public expectations, political opinions and corporate attitudes changed over time. This change comes along with a recalibration of the corporate strategy, which is more oriented towards urban integration and cooperation with the city of Basel (*From autumn 2022, the entire campus will be open to the public during the day. "We are working on making the site secure", says Gisiger. The fence around the campus is to come down – at least in a metaphorical sense. However, the individual buildings and facilities will have to be secured*, published in 2021 in *Basler Zeitung*, authors' translation).

In general, this conflict seems to be resolved with an urban integration strategy. There is a complex interplay of interests, in which the company is faced with the challenge of maintaining security measures while at the same time recognising the need to integrate the urban community and make a significant contribution to the urban structure. Actual accessibility as public space seems to be a central factor. It is also relevant that the city, as the approving authority for development plans, "negotiates" further improvements (e.g. re-zonings). In the development of zoning plans, there is always a plan submission (with the possibility of objections) and a political decision with the possibility of a referendum. In the case of Novartis, there were several such decisions and negotiation processes. Public access to the Rhine promenade was the key issue – as soon as this access was guaranteed, the amount of reporting on controversies decreased strongly.

4.3.4 Campus architecture and symbolic fit

Novartis chose renowned architects to underline the cooperate relevance of the campus and to attract international attention to its headquarters. In this case, architecture ap-

pears to be a relevant element in shaping public perception. Architectural tours have attracted considerable attention, demonstrating the public's interest in the campus' distinctive buildings and the great architectural originality. Public interest in the campus' architecture came along with further steps towards opening.

The campus is intended to be a landmark of timeless aesthetics, an approach that plays an important role in shaping the campus identity. Often referred to as a *lighthouse of architecture* (published in 2021 in *SonntagsBlick*, authors' translation), the Novartis Campus has become a magnet for visitors. In fact, architecture is amongst the main foci of press coverage. The campus is not only described as a global headquarters and a globally relevant research centre, it is also presented as a place of architectural design, for example by Diener & Diener, Frank O. Gehry and Herzog & de Meuron. Alongside the "skyline" of designed buildings, the Novartis Pavillon is considered the most significant architectural highlight of the campus project. It was designed by an international team of architects (AMDL CIRCLE and Michele De Lucchi from Milan). Realised late in the campus construction process, the Novartis Pavillon opened in 2022 and is a public building for exhibitions and events.

A closer look at the architectural descriptions in the newspapers reveals that the "uniqueness" of the architecture is emphasised. Overall, the architectural quality is an argument for the public's acceptance of the campus project. The *Basler Zeitung* speaks of *timeless aesthetics* (2022, authors' translation), the *Neue Züricher Zeitung* describes a *manifest against the visual uniformity of metropolises* (2010, authors' translation).

In contrast, the architecture of the Siemens Campus is characterised by a functional, modern and environmentally sensitive design, symbolised by its clear geometry. The campus is composed of *snow-white building blocks* (published in 2021 in *Handelsblatt*, authors' translation), creating a clean and modern aesthetic. The overall design follows a consistent structure of square blocks. In doing so, the campus embraces the spirit of the Huguenot architectural style of the historical Erlangen city centre: the *quadratic, practical, green* character (published in 2018 in *Nürnberger Nachrichten*, authors' translation) is supposed to embody both functionality and sustainability. In the compiled press articles, the Siemens Campus is often referred to as modern architecture, offering a contemporary work environment. More importantly, reference to the historical Erlangen architecture – in combination with the open accessibility of the campus – shows a high degree of urban integration in aesthetic terms.

5 Discussion and conclusion

Our comparative analysis shows that urban integration and the symbolic fit of large urban development projects do matter. First, accessibility for the public is in both cases amongst the more sensitive issues. In the Erlangen case, it was a topic of discussion only in the early implementation process. The opening of the formerly closed area can be seen as a supporting argument in the planning process. In the Basel case, the process was more conflictual and decisive. The discussions of the areas' (non-/semi-) public character can explain the differences between the media reporting to a large extent: there was clearly more controversy in the case of Basel, leading to much greater media attention. The rather late decision to partly open the area calmed a conflictual media debate. In particular, the permeability of cooperate space for the public seems to be a relevant driver for public acceptance of the project.

Second, the architectural fit seems to be a key factor for the implementation of the projects. In the existing literature on large urban projects, architectonic design is often framed as a problem. Unrealistic think-big visions may be hardly possible to realise – the Sydney opera is one of the most famous examples. This is different in the two campus discourses. In the Erlangen case, the somehow historically sensitive and overall functional architecture contributes to the smooth implementation process. The Basel case shows that "flagship" architecture can work as a relevant factor: (partly) opening the area in combination with offering a spectacular design led to a calming of planning conflicts. This is in line with findings by Floricel/Brunet (2023: 9), referring to the spectacular appeal symbolism of megaprojects.

Large urban development projects are complex endeavours that can certainly be accompanied by multiple conflicts and problems – but our study illustrates the possibility of relatively smooth implementation processes. In both cases, the role of public access to the project site as well as the role of design are of high relevance. These rather "soft" arguments of planning and implementation complement arguments of technical and organisational professionalism.

Our study has not operationalised the rather hard and technical factors that are prominent in the literature. Even if project size can be viewed as a problem (Dziomba/Matuschewski 2007; Gualini/Majoer 2007; Ansar/Flyvbjerg/Budzier et al. 2017), this seems not to be the case in the two examples presented here. Large entrepreneurial investments in rather small company towns can be seen as a specific constellation. Small company towns might facilitate strong governance axes that involve high-ranking decision-makers who know each other rather well ("the usual suspects"). This planning and governance characteristic can speed up decisions and reveal issues

more quickly than in the vast und complicated settings of huge metropolitan areas. This finding is in line with recent research by Fleury/Gomes (2024) and Lee/Scholten (2022), reflecting on private and entrepreneurial engagement. Moreover, whereas public sector planning often tends to strategic biases, i.e. intentionally underestimating costs in order gain political support, the company involvement might make realistic budgeting and controlling more likely. The two campus projects in Basel and Erlangen are at the lower threshold of megaproject dimensions. This scale might make it easier to organise modulated processes that are often seen as a success factor in megaproject implementation. Moreover, these large companies in medium-sized cities can be regarded as having a good reputation and enjoy a certain level of trust, which supports acceptance of large investments.

Our study does not operationalise the socio-economic framework of the case study regions. However, the overall prosperity of the regions appears relevant. Both the Erlangen and the Basel regions are amongst the most prosperous regions in Europe. At the same time, both cities are locations of research and development, which is discussed as a main driver of urban development (Edvardsson/Yigitcanlar/Pancholi 2016). These arguments together with agglomeration effects, a specific labour market and reputation factors can be interpreted as positive factors when it comes to the level of professionalism in planning institutions and processes. But as stated above, the latter arguments were not part of our empirical operationalisation: they can complement and differentiate our results, but they do not question the finding that the symbolic dimension – in terms of urban integration and architectural design – plays an important role for large-scale urban development projects.

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