

Optimizing Decision-Making for Climate-Neutral Post-War Buildings: The Architect's Role in Sustainable Transformation

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Abstract

The paper examines the role of architects in decision-making processes for the sustainable transformation of the existing building stock, focusing on early planning phases where demolition, preservation or redevelopment of post-war buildings is considered. Based on a multidimensional theoretical framework, it develops a heuristic model identifying five dimensions of influence: design framing, mediation, normative legitimation, political positioning and navigating planning uncertainty. Combining approaches from architectural sociology, professions theory and planning theory, the paper derives a qualitative analytical framework. The aim is to systematically reconstruct modes of influence and professional agency. It presents the theoretical basis, the conceptual model, the methodological approach and initial empirical findings from expert interviews. A more detailed analysis of the interview data will follow in the next stages of the research.

Keywords: Climate Neutrality; Post-War Buildings; Architects' Role; Sustainable Transformation; Decision-Making Processes

1. Introduction

Climate change and the increasing scarcity of resources make a more efficient use of existing materials and the reduction of greenhouse gas emissions ever more urgent. In addition to achieving climate neutrality in the building stock by 2045, the provision of affordable housing is among the core challenges facing the building sector in Germany.

The existing building stock plays a central role in the social and ecological transformation of the construction sector and holds substantial potential for sustainable transformation.

With the Renovation Wave (European Commission, 2020) as part of the European Green Deal, the European Union aims to at least double the renovation rate in the building sector by 2030. The initiative highlights refurbishment and extension of existing buildings as essential strategies to meet climate goals, emphasising their role over demolition and new construction. At the national level, the Circular Economy Strategy (BMUV, 2024) refines these goals by calling for longer service lives, the reduction of construction and demolition waste, and the promotion of closed-loop material flows. Preservation and transformation of existing buildings are explicitly named as priorities over demolition and new construction.



Figure 1: Demolition of a multi-family building from the 1950s and 1960s, Billhorner Röhrendamm (Hamburg)

Particular attention is given to the post-war housing stock, especially multi-family buildings from the 1950s and 1960s (see Figure 1). These buildings were constructed before the introduction of Germany's first thermal insulation regulation in 1977, tend to be poorly modernised (BSW, 2023), and exist in large numbers¹. They significantly shape the urban fabric of many German cities and reflect the planning paradigms of the time: they were built as part of both inner-city reconstruction on war-damaged sites and new, loosely arranged settlements on previously agricultural land. Due to subsequent urban development, many of these former urban peripheries are now situated in inner-city areas. The original low-density design and wide building gaps offer substantial potential for upgrading these neighbourhoods in line with contemporary demands for density and mixed uses.

Given the limited availability of urban land, rooftop extensions have become increasingly important. As a key strategy for densification, they contribute simultaneously to resource efficiency, energy refurbishment, and the creation of new housing units without consuming additional land.

Studies by Steger et al. (2022) and Hafner and Storck (2023) show that both the retrofitting and the rooftop extension of existing multi-family buildings, when combined with updated technical systems and energy sources, are ecologically preferable to demolition and new construction over the life cycle. Typically, such measures result in lower primary energy use and reduced greenhouse gas emissions, with the conservation of embodied energy and reduced operational emissions playing a decisive role.

Despite these well-documented benefits, the practical potential of working with the existing stock remains underutilised. Although demolition rates are relatively low overall, with only 0.07% of multi-family buildings

¹ According to the 2018 Microcensus Housing in Germany conducted by the Federal and State Statistical Offices, approximately 16.7 million apartments are located in buildings constructed between 1949 and 1978, with 10.5 million of these in multi-family buildings. This represents around 42% (or 26% for multi-family buildings) of the total housing stock.

demolished in 2013² (ARGE, 2016), a striking two-thirds of replacement constructions were built on sites previously occupied by structures from 1949 to 1978. This is precisely the stock that holds particular urban and ecological potential for sustainable transformation.

ARGE (2016) points to deep-rooted structural barriers hindering the development of the existing stock, including a lack of strategies among housing providers, inadequate tools for systematic resource assessment, and institutional or economic preferences for new construction. Uncertainties regarding cost forecasts, approval processes, and legal frameworks often lead to retrofitting or rooftop extension being perceived as risky, with demolition favoured as a seemingly safer alternative.

Demolition decisions are frequently made without systematic assessment, often driven by aesthetic, pragmatic, or speculative motives. In most federal states, demolition does not require a permit, meaning that no expert review of the building's structural integrity or environmental value takes place (Abrisskollektiv & Rieniets, 2025). Planning decisions are often based on individual experience and assumptions. The idea that retrofitting is not worthwhile frequently functions as an implicit planning premise (Abrisskollektiv & Rieniets, 2025).

The social consequences of demolition, particularly in high-cost urban areas, are increasingly being scrutinised. A growing profitability gap between old rents and anticipated returns on new construction is seen as a major driver, linking economic exploitation to planning decisions (Calbet Elias, 2025). In addition to a lack of regulation, insufficient environmental accounting standards are also criticised, since current planning processes largely ignore embodied energy as well as social impacts such as displacement or the loss of housing types relevant to urban policy (Abrisskollektiv & Rieniets, 2025).

The gap between the theoretical potential of building transformation and actual practice underscores that decisions on demolition, refurbishment, or rooftop extension are not based purely on technical, social, or ecological criteria. Rather, they result from complex negotiation processes shaped by conflicting interests, uncertainties, and institutional frameworks.

Early planning phase 04 provides the analytical starting point for this study, as it is particularly decisive in determining outcomes for the existing building stock. Fundamental decisions are often made in this phase, frequently under conditions of uncertainty, competing objectives, and limited information. Whether a building is demolished or retained and extended is often prefigured at this stage, implicitly shaped by assumptions about feasibility, economic routines, or institutional practices that promote certain options while excluding others.

This paper is therefore not solely concerned with the question of why the potential for rooftop extensions and retrofitting remains unused. Rather, this issue serves as a framework for the core analytical perspective: the qualitative reconstruction and analysis of decision-making processes in early planning stages.

Against this background, the focus shifts to a professional group whose relevance to sustainability-oriented decision-making in the building stock deserves particular attention: architects. As key actors in early planning stages, they are often the first to assess and communicate the architectural potential, spatial constraints, and design opportunities of a building, whether in a commissioned, advisory, or initiating role. Their influence often arises not through decision-making authority, but through the framing, visualisation, and mediation of options.

Based on the overarching dissertation project, which addresses the question "How can decision-making processes for managing post-war building stocks be optimised to achieve climate neutrality effectively and efficiently?", this paper focuses on the sub-question: **"What role do architects play in influencing and guiding decision-making processes towards sustainable and climate-conscious outcomes?"**

² In 2013, a total of 2,114 buildings were demolished across Germany, within an overall building stock of 3,120,696. Of these demolitions, 866 were carried out as part of replacement construction measures (ARGE, 2016).

³ See Calbet Elias (2025) on this: In Berlin, the proportion of demolished multi-family buildings replaced by new constructions rose from 43 per cent in 2020 to 63 per cent in 2022, particularly in high-price areas such as Charlottenburg, Mitte or Kreuzberg.

⁴ The so-called phase 0 is not officially part of the Official Scale of Fees for Services by Architects and Engineers in Germany (HOAI), but it is increasingly understood in planning practice as a preliminary phase for project development and clarification. It precedes service phase 1 (Preliminary Planning) and serves the strategic preparation of construction projects. Typical components include needs assessments, site evaluations, initial feasibility considerations, and the exploration of objectives, potentials, and constraints.

2. Research Context: Previous Investigations and Preliminary Work

In the first, quantitative part of the overarching research project, the potential for rooftop extensions on three- to four-storey apartment buildings from the 1950s and 1960s, owned by Hamburg housing cooperatives, was examined. The aim was to provide decision-making support for future densification strategies through rooftop extension. The analysis of potential was carried out on three levels.

(1) Urban scale

At this level, the quantitative potential for new residential units through rooftop extensions on the relevant buildings was assessed using digital maps and aerial imagery. The findings revealed significant numerical capacity: in the case of the housing cooperatives alone, approximately 9,725 new flats could be added through one-storey rooftop extensions, and around 14,588 through two-storey extensions (up to a maximum of five storeys). This extension potential corresponds to roughly one to one and a half times Hamburg's annual housing demand. Including comparable building typologies under municipal or private ownership would further increase the relevance of this building stock (Meyer & Klotz, 2023).

(2) Building scale

This level focused on analysing 83 construction projects with regard to typological similarities. The results revealed a high degree of standardisation in terms of building depth, floor height, and construction methods, which is especially relevant for developing serial solutions for retrofitting and rooftop extension (Meyer & Klotz, 2023).

(3) Structural scale

However, the technical prerequisites for rooftop extensions are not uniformly met. Structural analyses of existing buildings showed that foundations often provide little to no load reserves. In most cases, load capacity was between 90 and 100 percent. This means that in the majority of cases, rooftop extensions cannot be implemented without additional structural interventions, such as underpinning or foundation reinforcement (Meyer & Klotz, 2023).

In principle, rooftop extensions are feasible, but often require considerable constructional effort. Their technical and economic viability depends heavily on the extent of additional structural measures needed. For this reason, it is crucial to assess candidate buildings individually and thoroughly at an early stage. Only then can reliable judgements be made regarding their suitability for rooftop extension. Despite these challenges, the refurbishment and transformation of the existing building stock often represent both technically feasible and ecologically imperative alternatives to demolition and new construction.

3. Theoretical Framework: The Role of Architects in Decision-Making on the Existing Building Stock

Architects occupy an intermediary role in decision-making processes concerning the existing building stock. This role is shaped by design-based mediation, professional interpretive competence and situational influence. Although they usually do not hold formal decision-making authority, architects shape key directional choices through design options, scenarios and the framing of planning alternatives. This is particularly relevant in the early planning phase 0, which is characterised by uncertainty, goal conflicts and incomplete information.

A culturally informed perspective on the role of architects is developed by Führ (2004), who understands them as translators in dealing with the existing building fabric. Architects operate in a field of tension between material substance, architectural heritage and current demands. Their practice is marked by reflexivity, multidimensionality and contextual sensitivity.

They do not act as neutral service providers or autonomous authors but as actors who moderate meaning, shape spatial continuities and translate cultural values into present decisions.

Beyond cultural attributions, the role of architects can be further differentiated through institutional theory. Drawing on Scharpf (2000), decision-making processes in the built environment can be understood as interactive constellations within institutional frameworks, in which actors operate with divergent resources, interests and claims to interpretation. Architects navigate these constellations between technical requirements, legal regulations, social objectives and design-based quality standards.

An actor-oriented perspective is offered by Kurath and Eisinger (2010), who describe the role of architects as an emergent function within dynamic actor networks. Based on actor-network theory as developed by Callon and Latour, they locate architectural agency not within clearly defined professional roles but within situational and project-based negotiation settings. Architects are understood not as autonomous authorities but as negotiating partners who exert influence on decision-making through translation processes between social, political, technical and design-based logics. In this model, architecture is conceptualised as an intermediary practice that not only generates meaning but also translates and mediates it.

In light of increasing demands for climate neutrality, this intermediary role is becoming increasingly normatively charged. Haines (2010) argues that architects possess a systemic understanding of problem-solving that can integrate ecological, economic and social requirements. The design process offers a structured way to engage with goal conflicts and is particularly suited to embedding sustainability as a cross-cutting principle in decision-making. Donovan (2018) likewise highlights that architects are equipped, through their interdisciplinary mode of work, not only to implement sustainability in technical terms but also to culturally anchor it. She advocates for architectural education to place greater emphasis on transformative responsibility.

A more comprehensive theoretical framing is provided by Lavaf-Pour and Meraz (2023), who propose an integral understanding of architecture. In their model, sustainability is not reduced to quantifiable measures such as energy consumption but is conceptualised as an emergent quality located between objective requirements such as CO₂ reduction and subjective spatial experience. Architects assume the role of mediators between rationality and meaning, as well as between technology and atmosphere.

This responsibility is given an ethical and political dimension in the concept of “critical care” developed by Fitz and Krasny (2019). Architecture is here not understood as an instrument of progress but as a practice of care, contributing to the preservation, repair and resilience of a vulnerable environment. Architects are responsible for making long-term sustainability goals visible, for negotiating them and for defending them within concrete decision-making contexts.

A related position is put forward by the collective ANA (2025), which, in response to increasing demolition dynamics and politically embedded market logics, argues for an expanded professional understanding. This approach includes not only design but also mediation, moderation and discursive positioning. Such an engaged architectural practice involves, for instance, making hidden qualities of existing buildings visible, actively negotiating goal conflicts among stakeholders or critically questioning supposed economic constraints. Here, demolition is not framed as a technical issue but as a matter of societal negotiation in which architects participate through both design and communication. This expands the understanding of the profession to include an explicitly political and transformative dimension.

A power- and discourse-theoretical perspective on the role of architects is formulated by Stumm (2025), who shows that demolition decisions are rarely made in purely technical or neutral terms. Rather, they are grounded in historically developed knowledge orders and societal imaginaries. From this point of view, architecture is not an objective planning service but part of a political order that defines, through norms and expectations, what is considered worth preserving, functional or future-oriented.

A deeper layer of analysis is added by Rellensmann and Stumm (2025), who reconstruct demolition practices as a constitutive element of modern urban production. Architects are not only designers but also historical co-producers of a culture of devaluation, erasure and re-creation. Against this background, their role in sustainability-related decision-making is revealed not only as technical or communicative but also as politically and historically embedded.

In summary, this results in a profession-oriented approach to the research question. Architects possess specific resources, integrative design capacities, cultural translation skills and normative mediation abilities that enable them to influence decisions on the existing building stock towards more sustainable and climate-conscious options. Their role is not defined by position or authority but by their capacity to translate complex goal conflicts into actionable design strategies. The empirical study aims to systematically reconstruct these mechanisms of influence.

4. Hypothetical Model: Architects as Intervening Variables

Based on the previously developed theoretical framework, this section presents a differentiated understanding of architects as mediating actors in decision-making processes concerning the sustainable development of existing buildings. Although they generally do not possess formal decision-making authority, they exert influence through specific contributions in the early stages of planning processes, particularly in situations where decisions must be made about demolition or preservation. To analyse these dimensions of influence systematically, the following hypothetical model conceptualises architects as an intervening variable within institutional decision-making structures. The model distinguishes five primary mechanisms through which architects can shape decision-making processes.

(1) Design-Based Framing

By developing design variants and feasibility studies, architects structure the perception of available courses of action. What is perceived as technically feasible, architecturally compelling or economically viable is largely shaped by their design proposals. Especially in phase 0, when many parameters remain undetermined, the design prefigures decision logics. It creates spaces of possibility while simultaneously narrowing the field of options. This formative function of design is emphasised by authors such as Führ (2004), Haines (2010) and Lavaf-Pour and Meraz (2023), who position the design process at the intersection of cultural interpretation, systemic complexity and creative mediation.

(2) Mediation and Moderation

Architects operate at the interfaces between technical disciplines, public authorities, building owners and the broader public. In this role, they bring contradictory demands, such as cost constraints, sustainability goals and architectural quality, into structured dialogue. The task is not neutral translation but active negotiation. The manner in which arguments are introduced, and by whom, influences which objectives are pursued and which criteria become decisive. Kurath and Eisinger (2010), Donovan (2018) and the collective ANA (2025) describe this mediating role as situationally emergent and network-based, where architects do not only act as technical coordinators but also shape discursive and design-oriented moderation.

(3) Normative Legitimation

Architects possess both aesthetic authority and cultural interpretive power, which they can employ to assert normative positions, especially with regard to sustainability. By linking certain design solutions with terms such as “resource-efficient,” “future-oriented” or “climate-neutral” and presenting them in compelling visual formats, they frame construction options in ways that are not only technically but also ethically and culturally persuasive. This symbolic framing can legitimise specific approaches even when they are not economically or functionally superior. In early phases of planning, where sustainability is often just one of many competing priorities, this normative plausibilisation can be decisive for the continued consideration of specific options. Donovan (2018), Fitz and Krasny (2019) and Lavaf-Pour and Meraz (2023) describe this process as part of a design-based ethics of sustainability, which culturally legitimises technical measures and thereby alters the scope for decision-making.

(4) Political Positioning

Beyond design and communication, architects also have the capacity to act publicly, civically and politically. This includes involvement in civil society initiatives, participation in the reform of regulatory frameworks or questioning of existing assessment standards. In this way, they can act as political agents within a field of contested norms and values.

The collective ANA (2025), Stumm (2025) and Fitz and Krasny (2019) demonstrate how architects make visible that demolition decisions are not purely technical necessities but societal issues that require open negotiation and collective engagement.

(5) Dealing with Planning Uncertainty

Planning in the context of existing buildings is frequently shaped by unpredictability, incomplete data and limited controllability. While architects cannot eliminate uncertainty, they can make it productive by offering robust design variants, open process structures and spatial scenarios that allow for informed decisions despite limited knowledge. This requires not only technical knowledge but also tacit experiential knowledge, for example, in dealing with undocumented structures, material variability or changing usage requirements. In practice, this

experiential knowledge often replaces formalised evaluation tools and thus becomes a key resource in the planning process. Rellensmann and Stumm (2025) highlight the relevance of such experiential insights, while Kurath and Eisinger (2010) point to the situational generation of knowledge in hybrid settings.

This model serves as the basis for the empirical investigation of when and how architects influence decision-making processes towards more sustainable and climate-resilient outcomes, and under what conditions this influence remains limited. It also functions as a foundation for developing a category system for the qualitative analysis of expert interviews.

5. Methodological Approach

To empirically investigate the assumptions formulated in the hypothetical model, a qualitative-exploratory research design was chosen. The model does not serve as a hypothesis in the strict sense, but rather as a heuristic framework that guides the structure of the analysis and supports the development of the coding system.

The aim is to reconstruct decision-making processes in relation to existing buildings, particularly in the early planning phases where fundamental decisions are made under conditions of uncertainty and in the absence of robust decision-making criteria. The role of architects is not presupposed normatively but is to be analytically reconstructed from the perspectives of those involved. The study focuses on how architects frame decision-making options, incorporate sustainability into design and communication, and how they are either included in or excluded from negotiation processes.

The research follows a mechanism-oriented explanatory strategy that focuses on understanding the social processes through which specific decisions, between demolition, retrofitting or rooftop extension, are reached. Rather than testing quantitative hypotheses, the goal is to gradually reconstruct the conditions and constellations under which particular decision options are enabled or constrained.

The central data collection method is expert interviews based on semi-structured interview guides, following Gläser and Laudel (2010). The concept of the expert is defined in institutional terms: interviewees are not selected based on personal experience alone, but because of their access to structurally relevant decision-making contexts. The goal is to gain insight into operational and institutional “process knowledge”, such as routines, evaluation patterns and decision logics that are often not documented formally. The interview guides are narrative and reconstructive in nature. They follow real decision-making trajectories across project phases and provide insight into conflicts, uncertainties and path dependencies.

Three sets of interview guides were developed, each tailored to a specific actor group: architects (as the central group of this paper), representatives of housing owners (as formal decision-makers), and structural engineers (focusing on technical assessments under uncertainty). All guides are based on a common thematic structure consisting of seven core sections. The guide for architects includes: (1) introduction and contextualisation, (2) specific decision-making situation, (3) process and influencing factors, (4) understanding of roles and communication, (5) institutional framework, (6) reflection and evaluation, and (7) additional perspectives. The guide was pre-tested in pilot interviews and allows for flexible emphasis based on the respondent's experience.

Substantively, the guide for architects focuses on interpretative patterns in dealing with the existing building stock, the integration of design perspectives into institutional decision-making, and normative argumentation strategies. The guide for structural engineers explores how technical assessments emerge, are weighted and communicated, especially under incomplete information. For housing owners, the emphasis is on internal decision routines, economic logics and the framing of options such as preservation, extension or demolition as (im)plausible.

Interview partners were selected through two pathways: based on specific planning projects involving post-war buildings undergoing retrofitting, extension or demolition, and through recommendations provided by interviewees. To reflect the diversity of relevant decision-making contexts, institutional and contractual variation was ensured, including private, municipal and cooperative housing providers, as well as architectural offices with different client structures. The projects examined are either implemented or currently under planning, and include various pathways such as demolition and replacement, retrofitting or rooftop extension.

Interview analysis follows the methodology of qualitative content analysis according to Gläser and Laudel (2010) and Kuckartz (2018), and is conducted in two steps. First, a category system is developed deductively based on the hypothetical model and inductively extended through empirically derived subcategories. This allows the analysis to capture both theoretically anticipated and unexpected factors. In the second step, causal mechanisms and interrelations are reconstructed from the material. The analysis focuses on how decisions are made, under what conditions certain options are prioritised or dismissed, and how uncertainty is dealt with. A typology is then developed to systematically compare different decision-making logics and forms of influence.

The empirical results aim to contribute both to the theoretical refinement of the model and to practical implications for the early integration of sustainability expertise in planning processes.

6. Planned Empirical Implementation and Preliminary Results

Although the empirical study is still in its early stages, the interviews conducted so far already reveal initial tendencies that confirm and further differentiate central assumptions of the research project. At the time of writing this paper, six expert interviews have been conducted: four with architects and two with structural engineers. Additional interviews are currently being prepared.

The initial insights suggest that the effectiveness of architects in decision-making processes concerning existing buildings varies significantly. Crucial influencing factors include the structure of the client organisation, the prevailing planning culture and the political environment. In one case, the decision to demolish had already been made. The commissioned architect had no influence on defining the objectives and was only tasked with designing a replacement building. In another case, an architectural office was involved in an integrative planning team that brought together expertise in building services, building physics and architecture. Within this setting, sustainable alternatives, such as a timber-based rooftop extension and a façade refurbishment without conventional external insulation („Wärmedämmverbundsystem (WDVS)“), were introduced into the discussion at an early stage. Another interview case illustrated that arguments for sustainability were only successful if they aligned with economic objectives. It also became evident that political support, for instance from a city administration's leadership, was a crucial condition for the implementation of ambitious retrofitting concepts. At the same time, the interpretation of technical regulations was shown to be highly dependent on individual officials. In one case, a fire safety concept that had previously been approved for a different project was initially rejected and only approved after a change in staff responsibility. In several projects, overarching urban planning objectives prevented the implementation of rooftop extensions. In two cases, a higher building density was required than could be structurally achieved in the existing stock. In another project, a social conservation ordinance prohibited the use of ecological building materials on the grounds that they would lead to an impermissible increase in quality.

Several interviews also indicate that sustainability is rarely a formal part of the decision-making process. Instead, it is often introduced through design plausibility, communicative competence and institutional proximity to the client. These forms of influence are closely tied to the situational role that architects assume within a given project context. One structural engineer described his role in the decision-making process as the “late-stage technical confirmation” of previously developed design variants. This supports the hypothesis that technical assessments are often secondary, and that architectural framing may in fact become the primary decision-shaping factor.

Based on the case studies conducted thus far, three ideal types of architectural influence in decision-making can be identified:

(1) Architect as sustainability agent

This type is characterised by a proactive stance and a clear commitment to climate-conscious solutions. Architects in this role are involved in planning processes at an early stage and explicitly address sustainability in both communication and design. A typical example is the deliberate integration of strategies for the preservation and development of existing buildings as a guiding ecological and design principle.

(2) Architect as process moderator

This type assumes a mediating role between competing interests. Sustainable options are considered, but not framed as normative imperatives. Instead, they are embedded in broader strategic arguments. In one interview example, an architect succeeded in structuring a political decision-making process by visually presenting design alternatives, without explicitly advocating for one.

(3) Architect as neutral service provider

This type adheres closely to the client's specifications. Sustainability is not actively addressed, but may appear as a secondary condition. This type includes the case of the architect who was brought into the project only after the decision to demolish had already been made, and who was then commissioned to design a replacement building. Another interviewee explicitly described his role as apolitical and purely execution-oriented.

These ideal types are analysed in terms of the institutional and planning contexts in which they arise. Relevant factors include the type of project tender, the underlying project logic and the institutional setting. The key question is whether specific institutional or planning configurations systematically correspond with certain types of architectural influence. The results aim to identify the conditions under which architects can act effectively as transformative agents in the development of existing buildings, and the conditions under which their influence is systematically limited.

7. Conclusion and Outlook

The climate-conscious transformation of the existing building stock is one of the key challenges of the coming decades. Given the architectural significance of post-war buildings and the limited resources available for new construction, increasing attention is being paid to the conditions and processes of decision-making. This paper has shown that these decisions are shaped not only by technical, legal or economic factors but also, and in particular, by professional actors involved in early planning phases. In this context, architects play a central role.

Building on a multidimensional theoretical framework, this paper has developed a heuristic model that conceptualises architects as intermediary actors in decision-making processes on sustainable development of the existing building stock. The model identifies five mechanisms through which architects can influence decisions in the direction of climate-conscious and sustainable outcomes: design-based framing, mediation and moderation, normative legitimation, political positioning and the dealing with planning uncertainty. These forms of influence are not solely the result of individual agency but are institutionally embedded. Their effectiveness depends on the configuration of clients, organisational and planning conditions, the presence of political support and the quality of collaboration with other involved actors.

At the time of writing, the empirical implementation of the research project is ongoing. Six interviews have provided initial insights into typical patterns of architectural influence. The objective is not only to refine the model based on empirical findings but also to formulate practice-oriented questions. Of particular interest are strategies for integrating architectural perspectives earlier in decision-making processes, identifying institutional formats that strengthen design agency and exploring how the professional self-image of architects can be sharpened so that their cultural, communicative and normative competencies are strategically employed in socio-ecological transformation processes.

The research follows a dual objective. On the one hand, it expands theoretical perspectives from the sociology of professions and planning theory by offering a differentiated analysis of intermediary influence in the built environment. On the other hand, it proposes a practice-oriented framework for reflection that may be relevant for education, planning practice and institutional development strategies. The paper positions itself at the intersection of architectural sociology, professional studies and planning theory. It contributes to ongoing discourses in transformation governance and offers a perspective that connects institutional change with profession-related and architectural-theoretical insights on the built environment.

By focusing on the role of architects in addressing uncertainty, goal conflicts and normative ambiguity, this paper contributes to the question of how sustainability can become not only a subject of discussion but also a design and strategic factor in planning processes.

It thus aims to be both an analytical reconstruction of existing decision-making practices and a contribution to the debate on expanding professional agency in the context of sustainable development.

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