The Puzzle of Architecture and Bureaucracy

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ABSTRACT

Architecture and bureaucracy: indissociable *and* irreconcilable? The two spheres are often seen in opposition — the latter curtailing the former's creative power — yet might they not also overlap, partake and occasionally coincide in their processes? Dismissing the role of bureaucracy in architecture as extraneous or detrimental seems to hinder our capacity, as thinkers and producers of architecture, to work through this relationship and explore ways of dealing with a pervasive tool of contemporary societal organisation; whereas understanding the fraught relationship might help us bridge the gap that, in many contexts, separates architecture and the communities it exists to serve. This special collection explores how architecture and bureaucracy have negotiated their stances in the twentieth century. In particular, it aims to shed light on instances where knowledge of architecture was an element in, and a product of, the machinery of bureaucracy. Beyond the notion of bureaucracy in architecture as a site of imposition and control — and the vivid sentiments of frustration and deception it prompts — lies a terrain where less contrasted, more fine-grained actions and exchanges occur. The ways in which these two spheres relate are diverse and merit scholarly attention, as the articles that follow demonstrate.

It seems difficult to imagine modern-day communities in which some form of bureaucracy does not sit between the conception of a building and its materialisation. Bureaucracy and architecture — taking part in complex processes designed to deliver building projects set within larger social, cultural and economic circumstances — are inextricable. As these processes are set in motion, so too are forms of management, communication and labour organisation created to convey, negotiate and meet the needs and concerns of the myriad different players involved, sometimes over long periods of time.

The monumental façade of the Belgian Royal Library (1954–69) in Brussels, for example (Fig. 1), is but the outer shell of the many layers and kinds of bureaucracies that determined its more than three-decade-long design and construction history.¹ The library, conceived as a living memorial to King Albert I, was a project of the Belgian government. To prepare and ensure its realisation, an autonomous quasi-public body called the Fonds Bibliothèque Albert 1er was established in 1935. The architect of the building, Maurice Houyoux (1903–1960), was selected through a design competition in 1938, but due to the outbreak of the second world war, problems with the city council and other disputes, work did not begin until 1954. Throughout the long construction process that followed, the design of the building was discussed and processed in

different bureaucratic fora including the Commissariat Général of the 1958 Brussels World's Fair and the Ministry of Public Works, many times adapted, and modernised to a significant extent. While the front façade of the building, with its formal staircase and impressive portico, reflects the at times tense discussions on monumentality between the architect and the commissioning body, the surprisingly modern interiors (Fig. 2) reflect the progressive ambitions of the head librarian Herman Liebaers, appointed in 1956, who weighed in on the design debates and strongly promoted the idea of a technically and aesthetically up-to-date facility in service of the reader.²

The library was, in many ways, the product of exchanges specific to bureaucracy. Even more modest projects such as a simple single-family dwelling require complex interactions with bureaucracies: proposers must gain planning permission, show they adhere to building codes, submit specific forms and undergo established procedures, thereby becoming involved in bureaucracies, large and small. Bureaucracy is very much part of life in modern architecture.

This special collection for *Architectural History* sets out to investigate the relationship between architecture and bureaucracy by taking on board this complexity. Designers and thinkers generally see this relationship as one of opposition: simply put, bureaucracy is a hurdle for creativity in architecture, a site of imposition and control, a source of deception and frustration. When the word 'bureaucracy' is invoked in architectural historiography, it is most often used to describe the ordeal of a design process or denounce its failure, adopting the position (and sharing the pains) of the designer as bureaucracy's foremost victim. The theme has made its way also into accounts aimed at a much broader readership. Laurence Cossé's *La Grande Arche* of 2016, with the improbable story of President François Mitterrand's pet project for La Défense in Paris, is a noteworthy example.³

In our field, the association of architecture with bureaucracy has been most often approached in the sense formulated in 1947 by Henry-Russell Hitchcock in 'The Architecture of Bureaucracy and the Architecture of Genius'.4 This essay takes as its subject the large (usually North American) architectural practice, sometimes accommodating other services related to the built environment (engineering, interior design, landscaping), where a specific kind of bureaucratic apparatus is honed to optimise commercial output and to advance architecture as 'a profession and a business', to borrow the title of Morris Lapidus's 1967 book.⁵ Such firms have been gaining increased attention from scholars in recent times, with better- and lesser-known practices being examined for their philosophy and methods more than (just) for their designs.⁶ In his book Interior Urbanism (2016), Charles Rice dissects the professional position and the work methods in the 1960s and 1970s of the American developerarchitect John Portman, whose 'conjoining of architecture and development aligned business processes and architectural design at every step [...] well beyond a fee-forservice model'.7 Rice argues that this model of (bureaucratic) practice fomented a new sense of scale in urban interventions, with the emergence of the large-scale atrium, Portman's hallmark, 'a kind of proliferating force beyond intention, producing a mode of architectural practice and an urbanism, rather than being produced by them'.8

While not questioning the merits of such approaches, this special collection has a different focus. It is less concerned with considering architectural practice as a bureaucracy than with examining instances where architecture was one of the multiple



Fig. 1. The Belgian Royal Library, Brussels, Maurice Houyoux and Roland Delers, 1954–69, photograph by Pol De Prins, c. 1969 (CIVA Collections, Brussels)

remits of an institution, organisation or structure (whether public or private) and was carried out within that body's bureaucratic frame. The six authors in the collection explore how architects and other professionals involved in building production negotiated their roles and cultures in larger bureaucracies. They investigate how architectural design and research in a broad sense, encompassing the contribution of non-architect experts in multi-disciplinary teams, originated in bureaucracy.

The timeframe for this discussion spans from the 1910s to the 1970s, a period when urbanisation and construction globally witnessed unprecedented growth and increased complexity. The articles focus on a variety of subjects: moments marked by the combined influences of post-war reconstruction efforts and their effects; the multiplication and growth of public and private agencies whose specialised bureaucracies included architecture and urban planning within their remit; the industrialisation of construction and establishment of norms and standards; the global repercussions of the cold war; and the appropriation of architecture to shape national and political identities. Through examples in disparate political circumstances from advanced capitalism to communism in Belgium, Britain, Turkey, Italy, the German Democratic Republic (GDR) and Sweden, these articles show how bureaucracy was instrumental in supporting such developments. The collection retains a predominantly western slant, complementing studies on non-European and non-American contexts where the relationship between built environment production and bureaucratic apparatuses continues to be examined.⁹

Our intention when devising this special collection was to advance our understanding of how architectural knowledge developed in the milieu of bureaucracy, and to enquire



Fig. 2. Rare books reading room in the Belgian Royal Library, Brussels, photograph by Pol De Prins, c. 1969 (CIVA Collections, Brussels)

if, and how, bureaucracy served as a forum for knowledge exchange among the built environment disciplines and between these and other fields. These questions arise mostly in the latter half of the twentieth century. More specifically, the work presented here explores two aspects that are integral to the relationship between architecture and bureaucracy. First, the role and identity of individual authors within collective structures and how these were negotiated; this includes the question of reconciling (individual) creativity with the (collective) requirements for anonymity and general suspension of subjectivity, which are constituent of the concept of bureaucracy. Second, the pursuit of efficiency, a marker of the concept of bureaucracy, and its impact on architectural practice and culture, as seen within the broader canvas of scientific management theories and their implements, such as particular tools and record forms.

BUREAUCRACY, THE WORD AND CONCEPT

The most influential exploration of the concept of bureaucracy was by the German sociologist Max Weber (1864–1920) in an essay published originally in 1921 in *Economy and Society*. In Weber's theorisation, bureaucracy is a form of organisation management, typical of contemporary societies and institutions both public and private, geared towards what Sam Whimster terms 'the functional triumph of the administrative machine and the elimination of any personal, religious, or ethical traits from the running

of organisations'. ¹¹ Bureaucracy, in Weber's concept, works through the establishment of separate 'official jurisdictional areas' generally ordered by rules (laws or administrative regulations). Within a bureaucratically governed structure, regular activities are assigned to individuals as official duties, 'distributed in a stable way' to ensure their 'regular and continuous fulfilment', and 'strictly delimited' in their scope and means of execution. Hierarchy is essential: a 'clearly established system of super- and subordination', where lower offices are supervised by the higher ones and decisions can be appealed by 'the governed', in a 'precisely regulated manner', to the corresponding superior authority. ¹² Regularity, continuity, stability, recognisable hierarchy, control and appeal mechanisms and precise, exhaustive rules: these are the vital traits of bureaucracy.

The base-cell of bureaucracy is the *bureau*, the office room, with its material and human implements: written documents or 'files' are created and kept or 'preserved' (hence the central position assumed by the archive in bureaucracy) by a staff of officials, thoroughly trained 'in a field of specialisation' and devoted full-time to their public-service activity, which is strictly segregated from their private life. Staff hold a 'special technical expertise' that can be internally transmitted, practised and perfected; clear bounds ensure that matters can be regulated only abstractly, by agencies given such authority by decree, and not by 'individual commands', as in pre-bureaucratic organisations.¹³

Weber sees these components as instrumental in turning bureaucracy into the most advanced form of organisation, technically superior to any other, just as the mechanical modes of production surpass non-mechanical ones. They are also essential to capitalism: 'Today, it is primarily the capitalist market economy which demands that the official business of public administration be discharged precisely, unambiguously, continuously, and with as much speed as possible.' ¹⁴ Predictable results are ensured by 'calculable rules'. Bureaucracy, Weber notes,

develops the more perfectly, the more it is 'dehumanized', the more completely it succeeds in eliminating from official business love, hatred, and all the purely personal, irrational, and emotional elements which escape calculation. This is appraised as its special virtue by capitalism.¹⁵

Weber thus constructs bureaucracy as an ideal model for contemporary, capitalist organisations, public and private: one where subjectivity, individuality, flexibility and human nature have no place and where the '"objective" discharge of business' is carried out 'without regard for persons'. ¹⁶

This is the concept of bureaucracy that prevails in the collective imagination today, a notion that often raises antagonism from 'the governed' as a far from transparent form of governance, whose 'calculable rules' are left undisclosed. Over the years, Weber's concept has been criticised, not least for the causal link it establishes between strict hierarchical authority and efficiency: the sociologist Peter M. Blau argued that this relationship be treated as a hypothesis to be verified rather than simply assumed. Scholars also note that bureaucracy is the vehicle for enhanced power and surveillance by both state and corporations. Christopher Dandeker depicted bureaucratic surveillance as the administrative 'iron cage' that encloses modernity under capitalism, most apparent in key institutional sectors such as the armed forces, policing and business corporations.

For architects, the emergence of bureaucracy was problematic. If the goal of bureaucracy was, in Whimster's words, to 'optimise efficiency through the dehumanization of its processes', where did that leave the individual creativity of the architect?¹⁹ It is a force whose tenets contradict some of architecture's own. Architecture is heavily reliant on individual agency; bureaucracy, on its elimination. Architecture, as an idea, is inseparable from creativity, historically seen as stemming originally from a single, personal, unique view; by contrast, bureaucracy relies on general rules and the flattening of any exception or display of singularity. Architectural creativity, at least in theory, resists stability and avoids repetition, while bureaucracy cannot survive without these qualities. How can architecture, with its aspirations to artistic relevance, thrive in such a seemingly hostile environment?

MATTERS OF THE INDIVIDUAL AND THE COLLECTIVE

The imperative, fulfilled or not, to balance the individual and collective is at the core of the strained relationship between architecture and bureaucracy. The tension concerns not only issues of creativity and design authorship, but also professional deontology and ethics, and indeed the participation of architects in communities and society at large. Yet there are also characteristics that they share.

Architecture and bureaucracy are both fields for exercising power dynamics between the individual and the collective, and between the personal and the impersonal. If bureaucracy was created partly to depersonalise power and replace the seemingly arbitrary individual decision with the seemingly indiscriminate collective ruling, architecture too oscillates between the vision of the one (designer) and the interest of the many (citizens, as represented by governments and institutions), and one of its daily challenges is to negotiate and reconcile them. Like bureaucracy, architecture aims to contribute to social betterment, be it through individual or collective initiatives. Yet tensions between bureaucrats and architects arise when the latter (inevitably) become the bearers not only of their individual cultures and beliefs but also of the very specific (and legitimate) interests of their clients, who tend to prioritise their own interests over those of the community. Lastly, architects are also citizens, after all: while negotiating their intention through bureaucracy, and advancing their interests and that of their clients, they also hold bureaucracy as a potential security against competing intentions that might mar their purposes. In short, the challenges to architecture posed by bureaucracy are complex and nuanced rather than simple and clear-cut.

As several articles in this collection attest, the issue of the individual versus the collective emerges most clearly in cases where a bureaucracy takes on the task not just of commissioning, developing and managing buildings, but also designing them. Our authors ask: who were the individuals behind the agency's stamp? How did they combine their sense of individual agency with the requirement of anonymity often established by departmental protocols? What forms of creativity and practice, beyond the architect-as-author template, did they develop to circumvent the hierarchical and structural norms imposed on them? This tension acquires historical significance because the mode of production behind architecture — whether taking place in a boutique private practice or a large, multi-purpose office — affects how its products are

recorded, investigated and written about. Buildings designed and produced by state bureaucracies tend to be promptly categorised as 'everyday' architecture — the 'Bread & Butter' of the profession that John Summerson, with the London County Council in mind, saw as promising great things for communities after the second world war.²⁰ Yet such output has often been ignored or devalued when compared to that of freelance practice with its well-established mechanisms of publicity; the peremptory dismissal of municipal architecture as 'stale chocolate' by the Royal Institute of British Architects in 1938 — a view reflecting the self-interest of its members — often prevails, even now.²¹ In this collection, the contributions by Christopher Metz (on the London County Council after 1918), Bilge İmamoğlu (on Turkey in the 1960s and 1970s) and Stephanie Herold (on the GDR in the same period) add to earlier and more recent work shedding light on bureaucratic design production and overcoming the stigma often associated with it.²²

Just how much architectural historians stand to lose from shunning bureaucracies was indicated by Arindam Dutta's pioneering *The Bureaucracy of Beauty* (2007), whose approach to the influence of the Department of Science and Arts on museums, design schools and architecture throughout the British empire inspired some of the essential tenets of this collection. Existing research is impaired, Dutta argues, by the 'culturalist dismissal' of bureaucracies and the 'procrustean reliance on the avant-garde as the primary archive of shifting aesthetic sensibilities', portraying 'the state and government [...] primarily as interference in the aesthetic rather than as foundational to it'.²³ This 'embarrassment of the state' has particularly damaging consequences for our understanding of the global south, where 'the infrastructural supports of the aesthetic' are fundamental.²⁴ This critique seems equally relevant for western-focused academic studies and curricula that swiftly dismiss the possible qualities of bureaucratic forms of built environment production.

The architecture produced in government offices is not uniform. Official, public architecture seeking to represent central or local administrations and facilitate service provision in an efficient and productive way is one of the remits of bureaucracies; another is the provision of design and construction management services to support private schemes for collective use, such as social service facilities, where promoters lack such capacity. In both cases, design might be the work of in-house staff (civil servant architects) or of freelancers and consultants under contract with the administration. Design, production procedures and results differ, requiring a degree of detail that is often left out when these buildings are discussed. With their close focus on both objects and discourses, the articles in this collection account for such differences and thus broaden our understanding of how, and by whom, architecture was produced in bureaucracy. They stand in a long historiographical process by which the architect — and our perception of this figure — has been transformed, from the individual author, the architect-artist, into the accountable professional whose role, as part of a team, is diluted.²⁵

In effect, the notion of authorship — a primary aspect in art-historical accounts of architecture — becomes central when researching the design and building processes taking place in bureaucracy. On the one hand, the notion of bureaucracy is grounded on the suppression of the single author and the imposition of anonymity as an embedded quality. On the other hand, historical investigation shows how bureaucracy could foster the development of personal networks that bypassed official channels and facilitated alternative forms of authorship and creativity. This is one of the most striking

findings from Stephanie Herold's study of the GDR. Collective and/or anonymous work processes characteristic of bureaucracy, where traditional individual authorship was erased, also stimulated innovative thought and experimentation. Creative ways of working within the bureaucratic apparatus, drawing on it rather than simply withdrawing to perfunctory production modes, emerged in myriad contexts and towards very disparate ends: from housing schemes in Britain to new universities in Turkey and optimised, cost-controlled public buildings in Sweden.

TALKATIVE PAPERWORK: RESEARCHING ARCHITECTURE AND BUREAUCRACY

The work of architects and their presence in medium- and large-scale bureaucracies, then, was part of a complex picture. To comprehend the offices of private and public institutions and services devoted to research, design and building, as well as other offices indirectly associated with built environment production, from tourism to philanthropy and from state security to infrastructure, requires new scholarly approaches and methods, including a much closer attention to the history of government and state administration structures and agents. To take one instance, the remit of ministries of foreign affairs, which coordinate and execute foreign policy, generally includes the construction of diplomatic buildings in different parts of the world. The architecture of these buildings is informed and shaped by the bureaucratic organisation of a specific ministry. In some cases the ministry issued clear design directives, as in the series of post-war modernist United States embassies.²⁶ In other situations, however, much more room was left for initiatives arising from the architectural preferences of individual administrators: the Belgian consulate in Washington (1945–57) was to a large extent a personal project of the Belgian ambassador Baron Robert Silvercruys, whose professional network was pivotal in the selection of the architects Hugo Van Kuyck and Voorhees, Walker, Smith and Smith.²⁷ Recent studies demonstrate that, even without having architecture as a core remit, bureaucracies could still have a principal role in both built environment production and architectural culture: examples presented in a recent (2019) themed issue of the Journal of Architecture are the Tennessee Valley Authority in the US, the Calouste Gulbenkian Foundation in Portugal and the Centre for Institutional Studies, Research and Training in France.²⁸

As these and other studies make clear, a wider cast of agents, with a range of creative skills, is brought to the fore: those who commissioned, designed, produced and controlled architecture at its many scales are joined by other well-connected players from different professional groups, who also brokered initiatives and procedures. At their most successful, this broad cast found or created ways to play bureaucracy and use it towards their ends by understanding and incorporating its rules and importance in everyday production processes, thus countering the 'victim' status commonly attributed to those encountering bureaucracy. As we will see in the articles in this collection, to research the relationship between architecture and bureaucracy is to be particularly interested in reconstructing the original roster of names, their backgrounds, networks and affiliations: the human lining of the bureaucratic armour, which sometimes countered the latter's theoretical impersonality and anonymity. A prosopography of bureaucracy's actors is one valuable approach, as is shown in the contributions by Jens van de Maele on Belgium, Stephanie Herold on the GDR and Davide Spina on Italy.

HENRIQUE ALBINO JOSÉ CROFT DE MOURA ARQUITECTOS TELEP. 70 98 00 MEMORIA DESCRITIVA O Projecto que acompanha esta memória é o desenvolvimento do Ante-projecto apresentado à Exma. Câmara, tendo-se mantido o caracter inicialmente dado em que toma valor primordial o estudo da estrutura que foi concebido pelos autores do projecto numa tentativa de procura de elementos em que transpare cendo uma verdade construtiva se seguisse um rumo estético de acordo com as nossas tradições. O edifício foi projectado para escritórios e lojas. A finalidade do edifício torna difícil a posição exacta da sua estrutura se cundária visto que não se pode antever o divisionamento exigido pelas empre sas ou indivíduos que aí irão exercer as suas actividades. O Estudo que se apresenta, quanto à compartimentação interior, é apenas uma sugestão que po de ser cumprida se por "acaso" coincidirem as necessidades dos utentes. Como é obvio, a estrutura foi estudada de maneira a permitir uma modifica ção de compartimentação interna dentro da nodulação, contendo unicamente co mo elementos fixos as unidades sanitárias. Os pisos -1 e -2 são destinados a estacionamento de viaturas e obedecem nas suas características, tanto quanto a acessos como a condições de utiliza ção, às normas em vigor e indicações dadas quando da apreciação do ante--projecto. O piso de entrada, destinado a Comércio, está localizado ao nível da Av. An tónio Augusto de Aguiar, ficando o vestíbulo integrado no espaço comercial pelo emprego de grandes superfícies envidraçadas. Ao nível inferior do vestíbulo e no corpo de transição co BL REP te ficou localizada a habitação da porteira. Os pisos correntes foram ocupados com escritórios.

Instalou-se no último piso (terraço) um escritório maior com uma zona serviço que abrange 2 pisos do corpo de transição, stando a entrada da zo na de serviço ao nível do último piso corrente. A estrutura será revestida de pedra polida em todos os elementos verticais, estando as caixilharias estudadas para serem executadas em alumínio, funcio nando como guilhotinas a esconder no peito sendo protegidas por elementos pré-fabricados e pré-acabados que completarão a decoração dos elementos de rapamento. Projecta-se um elemento escultórico, esquematicamente apontado, elemento es este que irá dar ao edifício aquela valorização, necessária a uma obra des

Fig. 3. Henrique Albino and J. Croft de Moura, 'Memória Descritiva', part of the planning application for a multi-purpose building in Lisbon, 1961 (Arquivo Municipal de Lisboa)

Another thread is the effort to unearth one of bureaucracy's pillars, its archive, and let it speak to us. As researchers, we have only to gain if we learn to listen to this apparently subdued but often very talkative paperwork. Or, as Adrian Forty put it: 'Consulting the archive is like consulting the oracle — it doesn't necessarily reveal what you had hoped, or expect to find, and it speaks in riddles; you have to learn how to listen to the archive, to let it speak to you, before it yields its secrets. And what it hides may be as significant as what it reveals.'²⁹ Current research on the relationship between architecture and bureaucracy is therefore opening new roads for the history of modern architecture not only by bringing new objects (buildings) and agents into the discussion, but also by diving into the archive of bureaucracy and uncovering alternative ways that designers developed to engage with bureaucracy.

A case in point is the manipulation of bureaucratic paperwork by architects working in Portugal in the post-war period who were seeking to bring architectural practice up to date with the current state of the art.30 The planning and funding applications presented to state agencies and city councils included project statements that not only portrayed the functional and technical aspects of the project, but also engaged in aesthetic, ethical, philosophical and even political arguments in its support. These memórias descritivas were a legal requirement and bear similarities with the *notice descriptive* in Belgium and France and the relazione di progetto in Italy. They were not meant for publication or circulation and were to be read only by a small circle of planners and officials in planning or funding assessments (Fig. 3). In the 1950s, as a young generation of committed modernists resisted conservative officialdom within a highly centralised, dictatorial regime, these bureaucratic documents became a conduit for stance-taking, argumentation and the creation of a shared sense of purpose in the so-called 'battle of modern architecture'. When the architects Manuel Laginha (1919–1985) and Rogério Martins (1920–1997) presented their design for the social service and childcare centre in Loulé (1951-58), they used their *memória descritiva* to set out the justification for their (strikingly non-traditional) design (Fig. 4).31 Finding that their proposal was opposed by the minister of public works (a noted conservative who, in records exclusive to the bureaucratic archive, expressed his 'absolute aversion' to the building typology of the exhibition pavilion chosen by the architects), they responded that their 'pavilion-in-the-park' would 'embrace the playgrounds and gardens' to 'manifest its primary function — to house children'.32 The project was eventually funded by the state and built. Debates such as this appropriated bureaucracy's mechanisms (for example, the memória descritiva) to address arbitrariness and nourish the development of a discourse on contemporary practice shared by officials, clients and designers. A bureaucratic requirement became a means for architectural discourse and is now part of the historical record of an important change: the archive of bureaucracy is our only source to account for this development.

The paperwork of building bureaucracies can also help to clarify issues of authorship, individual and shared. From 1919 onwards, the architect Victor Horta (1861–1947) was involved with the founding members of the Palais des Beaux-Arts de Bruxelles non-profit organisation, an association uniting the interests of the city of Brussels, the province of Brabant, the Belgian state and important figures in the Brussels art scene to act as the client of the new Brussels Palace of Fine Arts (1922–28). Horta agreed to a limited fee as a way to support the project. A textbook example of Belgian art deco and



Fig. 4. The social service and childcare centre in Loulé, Portugal, Manuel Laginha and Rogério Martins, 1951–58, photograph of c. 1959 (DGPC/Forte de Sacavém, Arquivo Manuel Laginha)

celebrated for the acoustic qualities of the Grand Concert Hall, the building is known also for its innovative use of reinforced concrete and was considered the first significant public building in Belgium made entirely in that material.³³ However, the palace as built is structurally much more advanced than indicated by Horta's proposals. Research in the archives of the contractor, Blaton, reveals that it was an in-house civil engineer employed by the firm, Jules Van Dyck, who was responsible for these structural changes, which saved both time and money. In view of this, Blaton sought to claim at least a part of these benefits and requested an independent audit on the financial settlements. New statements, drawings and bills of quantities were produced by the contractor, which also added the original drawings of the architect and the engineers' calculation notes. Among the additional paperwork is a timeline (Fig. 5) that renders clear the relationship between written instructions, building phases and payments, and provides a detailed chronology of the design decisions, building process and contribution of each professional. While Horta's design for the Palace of Fine Arts remains fundamental and remarkable, the paperwork of the audit also clearly reveals the creative input of the contractor and 'anonymous' engineer as a crucial contribution to the building.

The document-based exchanges (written and drawn) prompted by bureaucracy are part of the wealth of material, produced and kept in bureaucracy archives, that historians of buildings can employ in in-depth readings of production processes. In their 2015 essay 'Writing Work: Changing Practices of Architectural Specification', Katie Lloyd Thomas and Tilo Amhoff explore the forms of architectural specifications as they

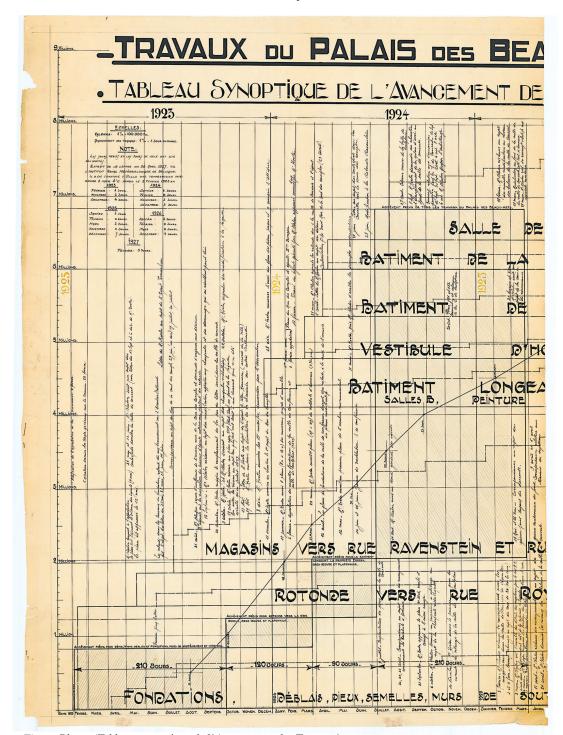
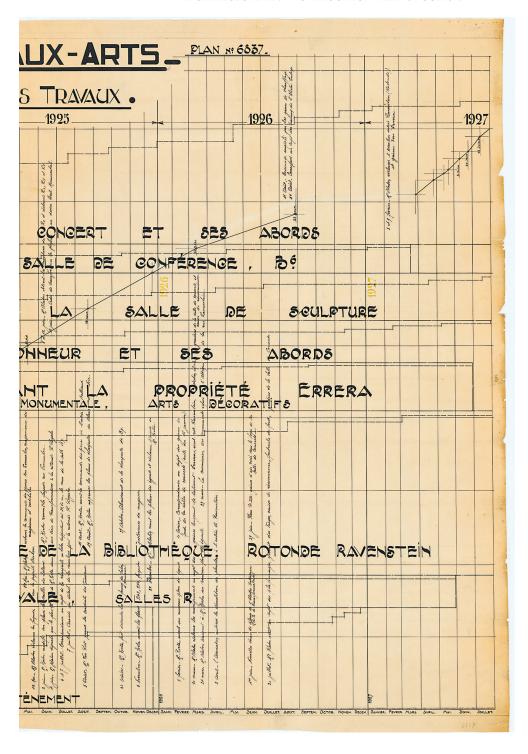


Fig. 5. Blaton, Tableau synoptique de l'Avancement des Travaux', c. 1928 (CIVA Collections, Brussels, Fonds Blaton)



developed over two centuries in London, showing how the involvement of the state and its bureaucracies changed the building industry and demanded of architects new responsibilities and skills in administration, communication and direction of works on site.³⁴ As building increasingly became 'the execution of the prescribed documents', London specifications suggest — like the *memórias* in Portugal — that architects found in 'writing work' a way to gain familiarity with construction processes and develop a theoretical interest in the craft of architecture.³⁵ Bureaucratic records became testimonies to this development.

It is not only architectural history that is taking a new look at bureaucratic paperwork. In his 2012 book *The Demon of Writing*, the psychoanalyst and cultural historian Ben Kafka treats it as cultural artefact; he proposes a critical history and theory of bureaucratic paperwork as a form of media, which can also shed light on built environment records. Kafka unpacks what Karl Marx called the 'bureaucratic medium', obscured and mystified by 'the comic-paranoid style of political thought to which [it] has given rise', and suggests readings that consider not only its objective content, but also its subjective, implicit and sometimes ambivalent content.³⁶ Kafka's playful yet serious approach to the 'administrative grotesque' is deployed in this collection by van de Maele to dissect the administrative—architectural developments in Belgian government facilities, while Spina's study suggests a similar approach in his treatment of the comprehensive apparatus of the Italian real-estate bureaucracy Società Generale Immobiliare (SGI).

MANAGEMENT, CONTROL, PRAGMATISM: FROM PRIVATE TO PUBLIC AND BACK

Bureaucratisation for the sake of increasing productivity forms another theme in this collection. This managerial logic is shared by the public and private realms, and some of our authors investigate the common ground. From the early twentieth century, many rapidly growing enterprises and institutions were confronted with managing increasing amounts of information, commodities and employees. As Zeynep Çelik Alexander has demonstrated with the Larkin Administration Building in Buffalo, New York, designed by Frank Lloyd Wright, architecture played a key role in handling this process of growth.³⁷ Influenced by the scientific management theories of Frederick Winslow Taylor, many companies and governance structures organised or reorganised their workflow and workspaces while also redesigning the social relations of employees, customers and citizens.³⁸ Buildings and their interior equipment were important allies in this process and in establishing a form of bureaucracy that Çelik Alexander, elaborating on the work of the historian Theodore Porter, called a 'technology of trust'.³⁹

The historical interconnections between management theories and the architecture produced by institutions, organisations or governance structures attest to the role of bureaucracy as a site, as an agent of knowledge exchange in the production of the built environment, and as a forum for the expression and discussion of ideas originating in disparate fields. In the context of bureaucracy, principles and concerns particular to the design and scientific professions — architecture, interior design, urban design, engineering, construction sciences and technology — meet issues arising not only from management, but also from sociology and economy, law and politics, administration, and government sciences and the ethics of public and private interests. These encounters

shape architectural thought and contribute to the materialisation of abstract concepts, including recurrent ideals of rationalisation and productivity.

Articles included here, such as those by Erik Sigge, Spina and van de Maele, explore these exchanges through investigations of how strategies employed in built environment production by private enterprise percolated to that of public administration or vice versa. In doing so, our authors suspend the dystopian sense that dominates major accounts of how American scientific management theory and practice penetrated architecture, from Siegfried Giedion's discussion of 'The Assembly Line and Scientific Management' in Mechanization Takes Command to Jean-Louis Cohen's Architecture in Uniform and 'Taylorism and Fordism for the Soviet Industrial Development' in Building a New New World.40 These illuminate the alienating potential of such appropriation: Reinhold Martin's The Organizational Complex conjures up the pervading threat of large scientific-managementinspired structures and their dehumanising effects on everyday lives; and Murray Fraser and Joe Kerr's Architecture and the 'Special Relationship' presents corporate bureaucracy as an instrument of control, the reach of which extended from the office to domestic life compellingly evoking mid-century chroniclers such as Marcuse, for whom 'Domination is transfigured into administration'. 41 In contrast, in Sweden, Italy and Belgium our authors found the potentially negative effects of the connection between management theories and bureaucracy to have been offset by prevailing, realistic pragmatism.

Implements typical of bureaucracy such as the diagram signalled, less ominously, the absorption into architecture of control devices born of scientific management. Hyungmin Pai's *The Portfolio and the Diagram* (2002) showed how the rise in the use of diagrams in architecture helped turn the programme into an essential piece of the designer's toolbox. Both diagram and programme originated in bureaucracies inspired by scientific management and gained currency in architecture as design work increasingly developed within bureaucracies or was led to follow their standards and norms. Through the diagram, Pai suggests, 'knowledge could be severed from practice and thus could function as the means of controlling practice', as it constituted a 'mechanism for the subject to control its object of knowledge'.⁴²

In brighter or darker shades, such stimulating discussions support our hypothesis that bureaucracy was a site of encounter: architectural design met scientific management and, from it, borrowed new tools to 'scientificise' itself.

SIX ARTICLES ON ARCHITECTURE AND BUREAUCRACY

The opening article in this special collection, Jens van de Maele's "As Efficient as a Factory": Architectural and Managerial Discourses on Government Office Buildings in Belgium during the Inter-war Period', investigates how architectural and organisational discourses were embedded in projects for ministerial office buildings in Belgium in the inter-war years. Government building (that is, new architecture) was presented as instrumental for government reform (better administration and better governance), based on the latest ideas on bureaucracy drawn from the world of industry and commerce and circulating internationally. Van de Maele shows how the planning of government offices, representing the combined effort of officials and designers (both independent and in-house), became a probe for wider experiments in promoting efficiency. It was left

to the designs to reconcile the conflicting imperatives of modern bureaucracy, such as the demand for 'mutual surveillance' based on visual transparency and the competing need for confidentiality.

Recurrent tensions between the individual and the collective are central to Christopher Metz's contribution, 'A Township Complete in Itself: The London County Council Architects and the Building of Becontree, 1919–34'. Faced with the unprecedented task of planning, designing and building an enormous cottage estate in the years following the first world war, the Architect's Department of the London County Council (LCC) expanded its payroll and revised its organisational structure, feeding into ongoing debates on the status and role of salaried architects in relation to private colleagues. In his detailed investigation, Metz sheds light on the LCC's organisational structure and architects' appointment process, the bureau's rarely named leading assistants, its wartime organisation methods and its constant (self-) scrutiny devices, an example of the set of checks and balances built into a bureaucracy that is seldom studied.

The relationship between the hierarchical structure of an office, architecture's modes of production and societal change forms the theme of the article by Bilge İmamoğlu, 'Between Bureaucratic Tradition and Professional Discourse: Turkey and the Case of SİSAG, 1969–77'. After 1968, new ideas about the organisation of intellectual and creative work found their way into public and quasi-public organisations involved with the creation of buildings. The case of SİSAG shows how these new ideas and practices fractured the architectural studio, leading to the architects going out on strike — the first white-collar strike in Turkish history. İmamoğlu shows how this development derived from both the longstanding tradition of civil servant architects in Turkey and the growing professionalisation of private practice in post-war years. Analysis of this 'in-betweenness' sheds new light on contemporary architectural discourse as well as the profiles of the architects involved and the day-to-day functioning of the office.

In the post-war decades, the Italian real-estate developer and contractor SGI also relied on a large bureaucratic apparatus for its day-to-day operations. In 'The Bureaucratisation of Architecture in Post-War Italy: SGI under Aldo Samaritani, 1945–73', Davide Spina examines how technocracy penetrated bureaucracy in Italy — with SGI as an enterprise under the spell of technocrats, against the backdrop of the (US-inspired) ascent of specialised expertise — and how a successful mid-century bureaucracy engaged in built environment mass-production was structured in terms of human and technical resources. At SGI, 'architecture was not practised as a craft, but as a business', and tensions between engineers (self-assured technicians) and architects (doubt-ridden artists) became evident. The existential angst of the architect-bureaucrats — and history's negative treatment of them — described by Spina for Italy existed, in fact, in other contexts as well.

Production modes and professional ideology are central to Stephanie Herold's article, 'Architecture and the Collective: Structures and Processes of Architectural Work in the GDR'. Focusing on two high-profile projects in Berlin, the television tower plaza and the Marzahner Tor, Herold explores the conflicting and occasionally contradictory work processes followed by designers within the broader conditions of systemic bureaucracy in the GDR. She discusses specifically the negotiation between individual and collective agency, and how creativity might develop from it, showing how this form of collectivist architecture spawned a 'creative confrontation' within

the group faced with precise tasks and limited scope. The bureaucratic setting of the GDR planning collectives, devised to integrate 'bourgeois' architecture into the socialist system, allowed in effect for some latitude of negotiation brought about by intersubjective processes, opening personal, expressive possibilities. Predictable, identifiable and well ruled, it was a mould, more formal than effective, that facilitated alternative, work-around pursuits by individual architects.

The relationship between bureaucracy and architectural experimentation in a very different socio-political context is the theme of Erik Sigge's article, 'Bureaucratic Reforms as Triggers of Experimental Design: KBS and Public Building in Sweden, 1963–74'. Sigge explores the drive for cost efficiency pursued by Sweden's National Board of Public Building (KBS) in the 1960s and 1970s. KBS focused above all on systems, repetition and economy, and this led it to employ the latest management tools for its architectural outputs, including programming, classification of components by longevity (long-, medium- and short-term), performance requirements, dimensional coordination and modular planning. Its innovative idea of the building as a product — to be designed, used, maintained, repaired, adjusted, adapted and extended — can be seen as a 1960s precursor for today's urgent explorations of circular and sustainable building.

Dismissing the role of bureaucracy in architecture as extraneous or detrimental seems to hinder our capacity, as thinkers and producers of architecture, to work through this relationship and explore ways of dealing with an inevitable tool of contemporary societal organisation. With examples drawn from a broad geographical compass, the articles presented here unveil cases where this relationship was fertile, even if in less than straightforward ways. Suspending prevalent views, these articles present finegrained narratives of architecture as a player of the bureaucracy game where defeat was not an automatic outcome. In contrast to the dominant fears of architectural creativity being crushed by bureaucracy, some of these case studies suggest that architecture was able not only to survive, but also to thrive in bureaucratic contexts, operating in new ways, circumventing the apparatus and fruitfully taking on board insights from other disciplines such as managerial sciences, sociology and politics.

Bureaucracy confronts practitioners of architecture with paperwork and regulations, admittedly, but it also challenges them with fundamental questions of work ethics. Bureaucracy positions architectural authorship and individual recognition, or even profit, within a larger organisational or societal context: the credit and benefit of the collective prevails (in theory) over the ambitions of the individual client or designer, an attribution which is in line with the organisational structures of large administrations. Efficiency also determines the work practices of architects when functioning in or for bureaucratic structures. The marker of efficiency — in following rules, in excelling in professional skills, in planning time and budget — not only allows them to objectify, control and evaluate work and results; it also becomes a lens through which architecture can be produced, read and appreciated. While, in its encounter with bureaucracy, architecture is often subject to conforming or neutralising mechanisms, the rich variety of how this confrontation plays out in different contexts and moments in time demonstrates that these universalising mechanisms elicit the specific needs and ambitions (social, political, economic) of individual administrations and render visible divergent identities.

The neutrality and anonymity that mark the attitude and results of architectural planning in bureaucracy have not helped in the appreciation of this architecture by the society for which it was produced. They have also led to a considerable blind spot for historians of architecture. The work that follows does not set out to reveal outstanding pieces of architecture to be included in the canon, but rather to move beyond it by offering knowledge of an architectural production that constitutes a substantial if often overlooked share of our built environment; by encouraging a more careful approach to the issue of authorship in architecture; and, crucially, by providing an extended understanding of architectural practice and the fields influencing its creative culture.

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