3. Face and Screen: Toward a Genealogy of the Media Façade

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Abstract

Craig Buckley questions the tendency to see the multi-media façade as paradigmatic of recent developments in illumination and display technologies by reconsidering a longer history of the conflicting urban roles in which façades, as media have been cast. Over the course of the nineteenth century, façades underwent an optical redefinition parallel to that which defined the transformation of the screen. Buildings that sought to do away with a classical conception of the façade also emerged as key sites of experimentation with illuminated screening technologies. Long before the advent of the technical systems animating contemporary media envelopes, the façades of storefronts, cinemas, newspaper offices, union headquarters, and information centres were conceived as media surfaces whose ability to operate on and intervene in their surroundings became more important than the duty to express the building's interior.

Keywords: Urban Screens, Architecture, Space, Physiognomy, Glass, Projection, Billboard

Introduction

One no longer need travel very far to encounter façades that pulse and move like electronic screens. Media façades have spread far beyond the dense commercial nodes with which they were once synonymous—New York's Times Square, London's Piccadilly Circus, Berlin's Alexanderplatz, or Tokyo's Shibuya. Some of the most ambitious media façades are today realized in places such as Birmingham, Graz, Tallinn, and Jeddah; Abu Dhabi, Tripoli, Montreal, and San Jose; Lima, Melbourne, Seoul, and Ningbo. Within the darkness of

a global night this emerging network of cities registers itself through a call and response of ever-changing luminous façades designed not only to mark a place in the city but also to circulate across television, laptop, and smartphone screens. The animated colours, images, and patterns on such façades are massive, hybrid, hardware/software interfaces that modulate and liquefy the apparent stability of the buildings they enclose. Media façades arguably exemplify architecture's loss of material gravity, a victory of ephemeral images over solid stuff that coincides with, and reflects, the competition between world cities to attract tourism and investment. And yet the temptation to see media façades in terms of dematerialized illusions and fleeting animations overlooks the fact that screens inevitably possess their own materiality. As the substance and technique of façade construction increasingly assume performance requirements once limited to optical screens, a building's ability to display and control moving images, graphics, patterns, and text has become a requirement as important as its material, shape, weatherproofing, or security. Broadly speaking, accounts of the media façade remain divided between those that analyze materials, techniques, and aesthetic possibilities as part of an operative project and those that decry their spectacular effect as a species of 'architainment'. The former often claim to renew the meaning and performance of the façade by linking it more intrinsically with digital media and interactivity, whereas the latter, in Luis Fernández-Galliano's memorable phrase, see the media façade as a symptom of how architecture's symbolic universe has been 'devoured by media'.¹ To grasp the transformation underway, neither an operative history of the media façade nor a dismissal of its spectacular effects seem sufficient. Rather than insist on an opposition between a symbolic domain proper to architecture and another belonging to 'the media', a historico-critical reflection might begin by recognizing and reconsidering the façade's deep and unstable historical role as a medium. Façades involved mediation long before building envelopes assimilated qualities formerly associated with optical screens. In keeping with the argument of this book, the media façade will not be understood primarily as an optical screen whose origins lie in recent technical developments. Rather, these surfaces represent a more fundamental opportunity to embark on a media genealogy of the façade. To do so calls for a deeper history of the tensions and conflicts manifested in debates over these entities. Screens assumed architectural and environmental meanings and functions long before they were autonomous planes for the optical display, and these screening functions intersect in complex ways with the roles that façades have been expected to play.

1 Fernández-Galliano, 2.

Amid the considerable and growing literature on screens, accounts of the media façade's history remain nascent. One dominant narrative has emphasized technology; seeing media façades as the result of efforts to integrate new illumination technologies—from neon and fluorescent tubes to high-power projections and LED screens—with the material surfaces of buildings. Yet how have such processes accommodated themselves to the history of the façade while also changing in turn its meaning and purpose? If we are to understand the media façade as a screen, what kind of screen is it? M. Hank Heausler's *Media Façades: History, Technology, Content* (2009), the first book that sought to compile this entity's global proliferation, adopts a technical definition: a media façade is any external building surface with an integrated capacity to display dynamic graphics, images, texts, and spatial movement.² The emphasis placed on the façade as a means for controlling images, patterns, graphics, and text distinguishes the media façade from light architecture, in the sense of illumination applied to buildings. In stressing the integration of a dynamic display with a building envelope, the media façade is a more restricted category than the urban screen. The latter, a term developed in media studies over the last decade, seeks to account for screens that are neither television nor movie screens, ranging from mobile screens associated with smartphones, tablets, and laptops to large-scale electronic advertising billboards, public displays, scoreboards, and information kiosks.³ While the definition of the media façade is narrower than that of the urban screen, both bodies of literature tend to agree that the phenomena are recent. *The Urban Screens Reader*, edited by Scott McQuire, Meredith Martin, and Sabine Niederer, points to the Spectacolor Board in Times Square (1976) as the point of origin for their inquiry.⁴ Heausler cites Renzo Piano and Richard Rogers's unrealized design for a large-scale media screen in their winning 1971 entry for the Centre Beaubourg competition as the historical origin for the current proliferation of contemporary media façades.⁵ In contrast to these technical accounts of origin, Erkki Huhtamo has advanced a media archaeology of public display screens that goes back to the middle of the nineteenth century. The video billboards populating early twenty-first-century cityscapes emerge, Huhtamo argues, from an earlier

2 Heausler further distinguishes between mechanical façades and three general electronic techniques: the use of projection, illuminant control, and digital display surfaces. See, Heausler, pp. 13–14.

3 Among the growing literature on urban screens, see McQuire, Martin, and Niederer, 2009; Verhoeff, 2012; Berry, Harbord, and Moore, 2013; Papastergiadis, Barikin, McQuire, and Yue, 2017.

4 McQuire, Martin, and Niederer, p. 9.

5 Heausler, p. 21.

formative stage defined by urban banners and bill-posting practices on the one hand, and public magic lantern displays on the other.⁶ Uta Caspary, by contrast, offers a different perspective. Analyzing the patterns assumed by digital media incorporated in façades, she argues that these surfaces should be understood and interpreted as part of a continuous history of architectural ornament.⁷

This essay builds on, but also differs from, these accounts. Seeking to critically reframe the question of the media façade's historicity, it retraces shifting articulations of the relationship between façade and face in architectural theory. More than the historical continuities of ornament or the intersection of bill-posting and projection, media façades can be understood within the intensified competition between building fronts and commercial messages—a cultural, technical, and political conflict that entailed a transformation in the face/façade relationship. As vertical surfaces in the metropolis came to be established as a form of private property distinct from the buildings to which they were physically attached, a struggle over visibility played out between proponents of the free and unfettered development of advertising and cultural efforts to preserve the city's architectural façades from what was seen as commercial defacement. In this sense, a technology like the magic lantern is less consequential for the emergence of the media façade than the spread of electrification around the turn of the twentieth century. Indeed, it was by seeking to reconceptualize the façade in electrical terms that architects sought to resolve the conflict between billboard and building face, making this cultural-technical transformation into something of crucial consequence for a genealogy of the media façade.⁸

It is also important to remember that the things we today call media façades were conceptualized and envisioned long before it was technically and economically feasible to integrate large scale audio-visual displays into building envelopes. Architects produced remarkably detailed visions for incorporating changing texts, images, and moving images into façades already in the 1920s and 1930s, and science fiction authors had ventured such ideas as far back at the 1880s. Given that the concept of the media façade precedes its realization, how might one understand the social emergence of this desire and its technological configuration(s)? The understanding of

6 Huhtamo, pp. 15-16.

7 Caspary, 2017.

8 There is substantial and growing literature on the consequences of electrification for architecture. Cf. Schivelbusch, 1988; Nye, 2018; Neumann, 2002; Isenstadt, Petty, and Neumann, 2015.

what is called a media façade might change when considered in light of a series of historical events in which the concept and practice of the façade was radically transformed as the result of cultural and technological conflicts. The aim is to grasp not the origins of the media façade but its emergence within a much longer line of descent, in which the mediating functions of the façade were inscribed into a new and conflicted system of purposes. In such an account, Piano and Rogers's competition entry for the Centre Beaubourg can be understood not as a beginning but as a recent descendant of a longer and more complex story. The following proposes a working outline of some of the key events within such a genealogy.

Façades and faces

Among the ancestors proposed for contemporary media façades, one of the most distant are the large expanses of stained glass characteristic of medieval cathedrals. Heralded as precursors to twentieth-century avant-garde light experiments since the 1920s at least, the stained-glass window has also been taken up by more contemporary critics seeking to historicize the integration of media screens into buildings.⁹ Writing at the beginning of the 1990s, Martin Pawley saw both stained-glass windows and movie screens as illuminated surfaces designed to 'convey visual information to large numbers of people'.¹⁰ Yet such a comparison, however thought-provoking, neglects the vastly different historical functions and meanings of such illuminated surfaces. To frame the problem of the media façade, the genealogy outlined here asks how the functions and operations of screening have intersected with the functions and operations of façades. Consequently, it begins at a later moment, when the façade came to be defined as an architectural concept.

The term *facciata* emerges in fourteenth century Florence and was etymologically rooted in the Latin *facies*—face, countenance, or visage.¹¹

9 Moholy-Nagy points to the medieval stain glass windows as a partial beginning for the light experiments of the 1920s, though one which was 'not consistently carried through.' Moholy-Nagy, 1925, p. 17. For a reflection on stained glass windows in relation to vertical screens, see Elcott's contribution to this volume. For a historical analysis of the Gothic choir screen as medium, see Jung, 2012.

10 Pawley, p. 119. The text was reprinted in a special issue on façades by the Berlin magazine Arch+ in 1990, which was the source in turn for Caspary's account, which argues for the stained-glass window as a key precursor of the media façade.

11 See Rossi, p. 308. On the regularization of façades in Florence as part of the efforts to open up the urban plaza around the Baptistery, see Trachtenberg, pp. 32-41.

The emergence of *facciata* likened a building's front to its *faccia*, or face, and belongs among those analogies to the human body central to Renaissance architectural theory. To conceive of a building's front as a face was to endow it with at least two functions. According to physiognomic discourses that go back to antiquity, the face was the part of the body that most vividly and unmistakably manifested the affections of the soul. Despite the variety of its elements, a face displayed an exemplary unity and was for this reason the most individual and unique part of the body. That which was internal and otherwise unseeable acquired visibility on the face. Such a surface was defined by a complex, expressive relation of inside to outside. Surveying key moments in architectural theory and practice, we might identify three different ideas of the face that inform changing conceptions of the façade. In the Renaissance, one encounters a model of the face as public image. In the eighteenth-century context of the French Royal Academy of Architecture, a revival of physiognomic ideas contributed to a more systematic theory of the face/façade as a 'mirror of the soul'. In the nineteenth century, a rationalist investigation of structure turned against such an idea of the face, drawing instead on analogies rooted in comparative anatomy. Attending to these very different ideas of the face, and the divergent understandings of the relation of interior to exterior characteristic of each, highlights the various kinds of screening expected of the façade.

Façade was a term notably absent from Vitruvius's *De Architectura*, the only surviving antique treatise on architecture. The text of Vitruvius had served as a central authority for Renaissance architects since its rediscovery in 1414, yet as Werner Oechslin has noted, while architects were readily able to codify its precepts concerning the order of building fronts, they long struggled to articulate anything like a clear concept of the façade.¹² The Renaissance palace façade was worked out in practice more than it was in theory; its paradigmatic form was rectilinear in outline, symmetrical in appearance, and hierarchical in organization. As a self-contained representation composed of classical motifs, such façades were also spatially and stylistically separated from their urban surroundings. Analyzing one of the earliest and most canonical Renaissance façades—the Palazzo Rucellai (1442-1451), attributed to Leon Battista Alberti—highlights how such early façades were not the outward face of newly designed buildings but often

12 Oechslin, p. 33. While there are a number of excellent studies of the theory of the façade in relation to periods or buildings, there is as yet no comprehensive genealogy of theories of the façade. See Burroughs, 2002; Schumacher, 1987; Szambien, 1996; Vidler, 1992.

exteriors that consolidated formerly separate buildings into an apparent unity. (Figure 3.1) More than a simple addition, the façade of the Palazzo Rucellai, like many other Renaissance palaces, necessitated the elimination of late-medieval elements such as porticos and loggias that had formerly served to mediate between street and building.¹³ The façade's unity was thus not rooted in anything like an underlying, inner wholeness. It was, rather, a superficial unity that sought to reorganize the building from outside in. It is for these reasons that Renaissance scholar Charles Burroughs had argued for the Rucellai façade to be understood as an 'opaque screen'.¹⁴ Such a façade enacted the qualities of a screen in presenting an outward image of classical unity that masked and integrated the heterogeneity of the pre-existing medieval urban fabric. The façade of the Palazzo Rucellai created a system of pilasters, windows, entablatures, and rustication as a public image, one that was at once a new, idealized representation of principles of classical unity and the primary face of the patron's cultural and civic ambitions.¹⁵ The alignment of screen and façade was forged in the tenuous physical relation between outward appearance and underlying building substance. The screen-face relationship signified unity yet marked a lack of organic connection between face and body, between surface and soul. In this, such early façades troubled the basic premises of the physiognomic analogy through which they were coming to be theorized.

Such a Renaissance example can be productively compared with the shifts taking place in eighteenth-century France. In the context of the Académie Royale d'Architecture, the authority of the Vitruvian canon became more contentious, and with it came an intensified debate over the normative proportions of the orders and of their relative character.¹⁶ In such a context, academic theory sought to articulate principles that would bring the façade into a more regular and substantial relation to the interior. The architect, professor, and theorist Jean-Francois Blondel made the analogy of façade and face explicit, drawing on a renewed interest in

13 For a detailed account of façade and the relation to the underlying urban parcels, see Mack, 1974.

14 Burroughs, pp. 16-18.

15 The patron, Giovanni di Paolo Rucellai (1403-1481), was a wealthy Florentine merchant navigating a role between Florence's most powerful families, the Strozzi and the Medici.

16 The introduction of the concept of character in architectural discourse is credited to the architect Germain Boffrand and was subsequently elaborated by Jean-Francois Blondel, Le Camus de Mézières, Jean-Jacques Ledoux, and John Soane, among others. For an account of the changed attitude to Vitruvius under the Académie Royale d'Architecture, see Kruff, 1994. For an overview of theories of character, see Forty, 2000.

3.1: Palazzo Rucellai, (1442–1451), Florence, Italy. Attributed to Leon Battista Alberti (1404–1472). © Alinari / Art Resource.

ancient physiognomic ideas. In the entry devoted to the term 'Façade' in Denis Diderot and Jean le Rond D'Alembert's *Encyclopédie*, he wrote, "The façade of a building is to the edifice what physiognomy is to the human body; the latter reflects the qualities of the soul, the former permits a

judicious judgment of the inside of a building'.¹⁷ Academic neo-classicism sought to overcome the separation between outside and inside that was characteristic of the Palazzo Rucellai. Only if the façade communicated a character appropriate to the building type could the architect ensure an integral and 'true' relation between a building and its purpose.¹⁸ As Anthony Vidler has shown, for Blondel's students, most prominently Claude-Nicholas Ledoux, the face/façade analogy was crucial and served to advance an idea of character understood in terms of universal sensations legible to a broad public rather than strictly an elite.¹⁹ Ledoux's enthusiasm for physiognomy as a 'natural language' echoed the writings of his infamous contemporary, Johann Kaspar Lavater. Such a physiognomic conception of the face was neither that of an opaque public image that screened off and separated the domestic from the civic, nor was it a literal correspondence between interior and exterior. Lavater's physiognomy posited an interior that was crucially about the soul, a metaphysical entity that, while itself invisible, could be revealed through visual interpretation. In this sense, the physiognomic façade was less an opaque barrier and more like the paper screens used to produce the period's physiognomic silhouettes. Such silhouettes were the result of a media apparatus that carefully assembled and regulated the proper relations between light source, subject, draftsman, and drawing instrument around a vertical sheet of paper. Unlike the myth of Butades recounted by Pliny, analyzed in this volume by Francesco Casetti, Lavater's paper silhouettes were not singular traces but inherently multiple, endowed with the rigorous graphic consistency required for comparing numerous likenesses. (Figure 3.2) Similarly, for an architect like Ledoux, deducing the interior from the exterior was not about seeing what was literally inside a building. Rather, it entailed interpreting an individual profile by reference to an understanding of different character types.²⁰ If the façades of Ledoux aspired to communicate character, this was not the emanation of something

¹⁷ Blondel, p. 355.

¹⁸ Blondel enumerated a range of different characters—from the sublime, noble, and free to the elegant, pastoral, and mysterious—to be used to determine the form and decoration of various building types. On 'caractère vrai', see Blondel, pp. 385-391.

¹⁹ See Vidler, 1987.

²⁰ Lavater's *Physiognomische Fragmente* (1775-1778) aimed to provide a more scientific basis for the ancient discourse of physiognomy—distinguishing it from pathognomy, which analyzed the changing manifestations of facial expression. Physiognomy concerned permanent qualities of character deduced from the permanent features of the face and head. As Graham Tytler has observed, what set Lavater apart from other contemporary physiognomists was his insistence that it was not moral character and habits that affected physical appearance but rather that the physical substance of the skull and face embodied aspects of the soul. See Tytler, pp. 51-55.

3.2: Johann Kaspar Lavater (1741–1801), “Machine sûre et commode pour tirer les Silhouettes,” from *Essai sur la physiognomie*, 1783.

unique. Rather, it aimed to express the typical purposes and moods of the emerging institutions of a mass society, such as prisons, hospitals, factories, and toll gates. (Figure 3.3)

By the middle of the nineteenth century, however, a distinct hostility to the importance placed on façade design was articulated in ways that would be consequential for the later course of modern architecture. The architect Eugène-Emmanuel Viollet-Le-Duc’s monumental *Dictionnaire*

3.3: Nicolas Claude Ledoux (1736–1806), “Propylées de Paris Chemin St. Denis,” *L’Architecture considérée sous le rapport de l’art, des mœurs et de la législation*. Edition ramée, 1847.

raisonnée de l'architecture française du XI^eme au XVI^eme siècle (1858-1870) is a key case in point:

[It] is only since the 16th century, in France, that one erected façades as one might put up a decoration before a building, without much concern for the relation of this covering to the arrangement of the interior. The ancients, like the architects of the middle ages, had no conception of a façade dressed solely to please the eyes of passersby.²¹

The building fronts of antiquity and the Middle Ages, he continued, were not façades in the academic sense at all; instead, they were 'nothing but the expression of the internal arrangement (*disposition intérieure*)'.²² An antagonist of the academic tradition ensconced in the Beaux-Arts system of training, Viollet-le-Duc saw in the architecture of the Middle Ages a thoroughly rational basis for relating internal organization and constructive arrangement to exterior appearance. Unlike Lavater's comparative silhouettes, the rationalist mode of visualization could not be content with external comparison; the outward appearance of a face taken on its own could not yield true knowledge. Viollet-le-Duc's alignment of structure with rationality depended on a penetrating gaze, one capable of cutting buildings and faces open. To visually grasp the integrity of the face's relation to the interior, the specific and inviolable appearance of the face needed to be sacrificed. The drawings that accompanied the architect's analysis of Gothic construction, as Martin Bressani has aptly observed, might well be understood as 'clinical' in a Foucauldian sense.²³ Viollet-le-Duc's drawings of historical structures, he argues, are comparable to the period's anatomical treatises such as Jean-Marc Bourguery's *Traité complet de l'anatomie de l'homme* (1831-1854), which presented bodies in cutaway view, as though the skin had been removed, and the relevant anatomic pieces pulled apart so that their relationships could be mentally re-assembled.²⁴ (Figure 3.4) Viollet-Le-Duc's views similarly penetrate the materiality of walls and partitions, paradoxically pulling elements apart from one another so as to make visible their internal relations. (Figure 3.5) Construction, unlike the physiognomic idea of character, was not an inward quality inferred from

21 Viollet-Le-Duc, 1858-1870.

22 Ibid. '[...] *ce que nous entendons aujourd'hui par façade n'existe pas dans l'architecture du moyen âge.*'

23 Bressani, pp. 126-128.

24 The illustrations were painted by Nicholas-Henri Jacob, a pupil of Jacques-Louis David.

3.4: Jean-Marc Bourguery (1797–1849), Plate 94 from *Traité complet de l'anatomie de l'homme comprenant la médecine opératoire*, 1849. Illustration by Nicholas-Henri Jacob. © Universitäts Bibliothek Heidelberg.

secondary signs; it was a logical and functional relation between parts that was to be pursued in depth, an aesthetic continuity between structure and surface rooted in a constructive rationale. For the tradition of structural rationalism that Viollet-Le-Duc influentially codified, the ideal façade was to possess a conceptual transparency, guiding the reasoning mind to

3.5: Eugène-Emmanuel Viollet-le-Duc (1814–1879), Plan and cutaway perspective illustration of Gothic vaulting, from the article “Construction,” in *Dictionnaire raisonné de l’architecture française du XIe au XVIe siècle*, (1858–1870).

penetrate the opacity of experience layer by layer. This anatomical disposition, premised on a direct correspondence between interior arrangement and exterior appearance, aimed to discipline the dangerous independence of the face and to keep façades from becoming superfluous masks.

As the use of iron and reinforced concrete grew in the late nineteenth and early twentieth centuries, frame construction became increasingly dominant, throwing the architectural status of the non-load-bearing wall, and thus the façade, into question. The rationalist suspicion of the façade expressed in Viollet-le-Duc's writings would be amplified by the historians and critics who theorized the modern movement during the first decades of the twentieth century. From critics such as Adolf Behne and Sigfried Giedion to architects and artists like Le Corbusier, Frank Lloyd Wright, and László Moholy-Nagy, it was not only a question of disciplining the building's façade but of declaring its obsolescence, of breaking it open, or of making it disappear.²⁵ Yet, in an unexpected twist, it was among those currents most committed to attacking the façade, notably interwar constructivism, that efforts to integrate the independence of the face would paradoxically provide the conditions for the emergence of what we currently call a media façade.

Billboards and façades

To follow such a twist, it is important to consider two events whose emergence and unfolding during the second half of the nineteenth century complicated the inside-outside relationship established by these three different ideas of the face/façade. Neither event had any precedent within architectural theory concerning the façade and could not be readily assumed into them. Both remain crucial for comprehending the changes in the façade's role as screen. The first concerns the creation, legitimization, and normalization of systems that allowed for the proprietary control of large vertical surfaces for

25 While the contextual motivations of these arguments differed in each case, in this context it will suffice to note a shared hostility to the façade as a concept. Adolf Behne's *Modern Functional Building* (1926), a pioneering effort to collect and theorize Germany's 'Neues Bauen' (New Building), opposed the concern for building with a concern for the façade in an opening chapter titled: 'Nicht mehr Fassade, sondern Haus.' Sigfried Giedion's 1928 history of reinforced iron and concrete described Le Corbusier and Pierre Jeanneret's Villa Stein de Monzie as having 'attacked the façade of the building with enormous boldness and left it so penetrated with air that one can almost speak of crushing the actual house volume'. Giedion, 180. Moholy-Nagy's *Von Material zu Architektur* (translated into English as *The New Vision*) reproduced an image of showgirls stretching on the marquee of the Scala theatre next to a declaration that the 'concept of the façade is already eliminated from architecture.' Moholy-Nagy, p. 179.

the dissemination of commercial messages in urban contexts. The second concerns the impact of electricity upon the design of façades.

In the middle decades of the nineteenth century, poster advertising in the major cities of Europe and America grew exponentially as billposters, who were paid directly by advertisers, competed to place as many signs as possible on façades, walls, fences, and lampposts. (Figure 3.6) Initially this practice was conducted without permission or by means of ad hoc exchanges with individual building owners.²⁶ The increasingly fierce and chaotic competition among billposters resulted in the creation of special hoardings for the posting of bills as early as the 1860s in London and Paris and by the 1870s in New York. In the later 1880s and early 1890s, trade organizations that had been formed by consolidating groups of billposters began to regulate the practice and proposed standardized display structures for urban advertisements.²⁷ By the first decade of the twentieth century, the Billposters' Association of the Americas required that members only post in spaces owned or rented by the association, specifying which posters could be assigned to what locations and for how long. Such self-regulation, Catherine Gudis has argued, was crucial to establishing billposting as a legitimate enterprise, with a rightful basis for the ownership and use of vertical property in urban contexts.²⁸ Billboards were thus distinct from hoardings, to the extent that they were governed by exclusive ownership rights that could be traded and transferred. From the late nineteenth century, as the volume of urban advertising grew, billboards began to compete with façades for visibility in the metropolitan centres.

The billboard, like the façade, was a vertical urban surface whose value derived from its visibility. Yet unlike the façade, the billboard's value lay in the ability to organize (and profit from) a continually changing set of words, forms, and colours. This type of visibility was incompatible with architectural notions of character, which had sought the typical, unchanging, and metaphysical qualities of the face, not its temporary expressions. The visibility of the billboard was even more unlike the ideal façade of the structural rationalist tradition, which disavowed any purely superficial and arbitrary relation between inside and outside. It was precisely the competition between billboards and façades that led reformers, particularly the Beaux-Arts-inspired City Beautiful movement in the United States, to oppose billboards. Two very different notions about the legitimacy of vertical urban

26 See Gudis, pp. 14-15.

27 Gudis pp. 20-23, and Baker, 2007.

28 Gudis, p. 23.

3.6: Gilbert Abbott à Beckett (1811–1856), *The Billstickers' Exhibition*, *Punch*, 29 May 1847, p. 226.

surfaces struggled for dominance: on the one hand, the idea of a free and unfettered pursuit of attention and profit in the marketplace, and on the other, the argument that an ideal of civic beauty, exemplified by the façades of Beaux-Arts buildings, ought to be protected from the untrammelled excess of commercial persuasion.²⁹ For detractors, the billboard was screen-like to the extent that it concealed and disfigured building façades, exposing passers-by to unsolicited messages sometimes of an unwelcome or inappropriate kind.

It was the billboard's capacity to obscure façades that led architects to search for methods by which to control and direct its effects—leading them, eventually, to incorporate aspects of billboards into the design of façades. The means for doing so depended less on traditions of projection derived from the magic lantern than on the electrification of major metropolitan centres from the 1880s onwards. As David E. Nye has observed regarding turn-of-the-century America, the conflict between the elite City Beautiful movement and populist proponents of unfettered commercial lighting pitted advocates of a harmonious and unified approach that sought to integrate electric light into the massing and ornamentation of buildings against the push for brighter and bigger 'spectaculars' (as electrified billboards were called) designed to dazzle the eye rather than integrate into façades.³⁰ The former were modelled on techniques of outline lighting developed at world fairs, where strings of incandescent bulbs were used to trace architectural features, together with a judicious illumination of niches and porticos.³¹ The goal was to clearly demarcate the façade's silhouette and enhance its main

29 Baker, p. 1188.

30 Nye, p. 133.

31 See Nye, 2016; Champa, 2002.

elements. (Figure 3.7) Urban advertising spectacles and fairgrounds such as Coney Island's Luna Park linked electric light to large-scale pictures, words, and movement effects. In such signs, slogans, brand names, and advertising copy came together with images of pickles, fishermen, and chariots to form an urban image-text that was alien to the historical vocabulary of façade design and aimed to compete with these cultural forms. In the American context, elite cultural opinion would fight to restrict and remove the proliferation of such commercial lighting well into the 1930s.³² During the same years in Europe, the situation was different. Particularly in Weimar-era Berlin, the architectural avant-garde began to embrace rather than reject the illuminated advertisement, or *Lichtreklame*, as it was known in German.

As Berlin recovered from WWI, it aimed to position itself as a world city, and it was within this discourse on the metropolis that ideas about illuminated advertising began to shift. Commercial signage came to be seen as a uniquely powerful element of the façade rather than its antithesis. Photographs of New York's Broadway circulated intensively in the books and journals of Weimar Berlin—one of the best known being Fritz Lang's double exposure of Times Square's illuminated signs in Erich Mendelsohn's *Amerika: Bilderbuch eines Architekten* (1926).³³ (Figure 3.8) Writing in the German Werkbund's journal *Die Form*, the architect Alfred Gellhorn exemplified a broad shift in attitude to the façade. Rather than reject illuminated commercial billboards, he raised the question of reforming and reshaping them:

As long as our cities are ugly stone deserts, we will want to make over the walls of the streets and squares with colour and light.... Rather than billboards in front of the windows as in America, where you buy entire façades and work behind them in artificial light, seize the façade itself and form it in such a way that it yields the spatial possibilities missed when they were erected.³⁴

Rather than presenting incompatible alternatives, an opportunity lay in forming the façade and the illuminated billboard so that they might incorporate each other. For leading architects and critics in the German avant-garde in the 1920s, illuminated billboards shifted status; the thing that threatened the façade was seized as the very material for reshaping a building's face, producing new 'spatial possibilities' and effects in

32 See Wood, pp. 25-26; Gray, 2001.

33 Mendelsohn, 1926. For an overview see Neumann, 2002.

34 Gellhorn, pp. 134-135.

3.7: An example of outline lighting. Panoramic view of Festival Hall, Louisiana Purchase Exhibition, St. Louis, 1904. From *The Universal Exposition Beautifully Illustrated*, St. Louis, MO.: Official Photographic Company, 1904). Courtesy Beinecke Rare Book and Manuscript Library, Yale University.

time that earlier generations of architects were not originally able to comprehend.³⁵

Nor was it only in Berlin that the interest in light and illuminated advertisement propelled a rethinking of the façade. A crucial project in this regard was Alexander and Victor Vesnin's 1924 competition entry for the Moscow headquarters of the *Leningradskaya Pravda* newspaper. (Figure 3.9) Designed for a tiny 6 x 6 metre site, the building was conceived not as a printing facility but as a site for editorial work, sales, urban communication, and advertisement. The Vesnin brothers' combination of steel frame and sheer glass exposed everything to the exterior including a kiosk, reading room, editorial offices, and even the elevators. If the building's reductive use of steel and glass exemplified a rationalist ideal of constructive transparency, it was this very clarity that began to incorporate multiple media systems. Presenting the project in the journal *Sovremennaiia Arkitektura* in 1926, they noted: 'The façade fronting Strastnaia square includes: a vitrine for moving messages (*tekushchikh soobshchenii*), an apparatus for illuminated advertising, clocks, a loudspeaker, and a projector.'³⁶ On the sloped portion of the glass façade, the Vesnin brothers' drawing indicated news from Paris and Berlin to suggest that this surface was

35 Here one might include the architect Hugo Häring's claim that 'commercial buildings don't have a façade anymore, their skin is merely scaffolding for advertising signs, lettering, and luminous panels' together with his belief that the 'nocturnal face' of architecture would become its most important attribute. See Häring, 'Lichtreklame und Architektur', cited in Neumann, p. 39.

36 Vesnin, p. 1. Special thanks to Richard Anderson for assistance with the translation and for sharing his knowledge of the project.

3.8: Fritz Lang (1890–1976), Photograph of Broadway at Night, reprinted in Erich Mendelsohn *Amerika: Bilderbuch eines Architekten*, 1926. Courtesy, Haas Arts Library Special Collections | Yale University Library.

conceived as a projection screen for changing editorial content.³⁷ Neither an opaque billboard in front of the façade nor an extension added to it, here a mixture of public messaging and news became integrated, visually and tectonically, with rationalist transparency. The expectation that the façade express the building's interior continued, yet it belonged to a very different system of purposes. It was neither strictly a notion of character nor a constructive system that was expressed; it was, rather, a building devoted to intellectual production that projected its own activities onto the surface of its façade. Such activity was not of the same order as the skeleton but was an index of the accelerated temporal rhythms of metropolitan communication. The project's reference was not primarily to the billboards of the capitalist metropolises but to the graphic mechanisms found in the period's revolutionary propaganda. The Vesnin's project was indebted to Vladimir Tatlin's proposal for a *Monument*

37 Jean-Louis Cohen notes that the searchlight on the building's roof was to be used to project messages in light upon the clouds. See Cohen, p. 165. On the importance of wireless image transmission for Ivan Leonidov's 1928 Project for a Worker's Club of a New Social Type in *Sovremennaiia Arkitektura*, see Anderson, 2013.

to the *Third International* (1919-1920), whose rotating cylindrical volume was to house a communication office incorporating newspaper and manifesto production, a telegraph station, and projectors for a large screen. Yet by 1924 it could also have been inspired by numerous projects for kiosks, loudspeaker stands, rostrums, street decorations, and stage designs that flourished in the years following the Bolshevik revolution.³⁸ Here the conceptual transparency demanded by structural rationalism merged with a desire to integrate the mechanisms of news production with media oriented to consumption, a condition in which the absence of a typical façade was conceptualized as a new kind of broadcast screen.

The vision of integrating news production, public projection, and telecommunication into a single building was, however, already in circulation well before Soviet Constructivism, notably in nineteenth-century science fiction. Albert Robida's novel *Le vingtième siècle* (1882) described the headquarters of the twentieth-century newspaper *L'Époque* as a 'truncated pyramid' constructed from iron and agglomerated paper, flanked by two electrically illuminated screen disks. The first was devoted to projected advertisements, the other was a 'telephonoscope' screen allowing the newspaper's reporters to send moving images of live events back to Paris from any point on the globe.³⁹ In Robida's illustration, the separation of the screens from the building remains a crucial detail. (Figure 3.10) While all the elements of the early twentieth-century media façade—electrification, ferrous metallic structure, large glass surfaces, projected images, dynamic control mechanisms, news, and advertising—are present in Robida's headquarters, they are still not yet conceived as a single, integrated façade in the manner that emerges in the 1920s.

Other buildings of the interwar years sought to link the integration of artificial light in the façade with the control over changing combinations of words and images. Jan Buijs and Joan Lürsen's headquarters of the Dutch Socialist Cooperative *Vollharding* (1928) in The Hague alternated plate glass windows with translucent illuminated opal glass panels. The gridlines within these panels were designed to accommodate letters and various forms, which made these portions on the building's façade into a dynamic messaging system.⁴⁰ Here too, notably in a socialist cooperative, the conversion from billboard to illuminated media façade was pursued. A similar shift appears in the media window included in Alvar Aalto's 1931 design

38 S.O. Khan-Magomedov has stressed Alexandr Vesnin's designs for the staging of *The Man Who Was Thursday* as an influence in this regard. Khan-Magomedov, pp. 134-135.

39 Albert Robida, p. 177.

40 Neumann, p. 132.

СОВРЕМЕННАЯ АРХИТЕКТУРА

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НОВЫЕ МЕТОДЫ АРХИТЕКТУРНОГО МЫШЛЕНИЯ

Одно десятилетие отделяет нас от архитектурного „благополучия“ довоенного времени, когда в Ленинграде, Москве и других крупных центрах лучшие русские зодчие беззаботно насаждали всевозможные „стили“.

Много ли десятилетий?

Маленькая трещинка времени. Но революция, уничтожив косные предрассудки и отжившие каноны, превратила трещинку в пропасть. По ту сторону пропасти остался последний этап увядания одряхлевшей системы европейского мышления, беспринципный электизм, имевший наготове тысячу художественных рецептов, апробованных нашими декадами и правдами, готовые черпать истину откуда угодно, — но только в прошлом.

По эту сторону открывается новый путь, который еще надо прокладывать, новые просторы, которые нужно еще заселить. В обстановке сегодняшнего дня куется мирозерцание современного зодчего, создаются новые методы архитектурного мышления.

Вместо старой системы архитектурного творчества, где план, конструкция и внешнее оформление задания постоянно находились во взаимной вражде и где архитектор был по мере сил своих примирителем всех этих неразрешимых конфликтов, — новое архитектурное творчество, прежде всего, характеризуется своим единым нераздельным целевым устремлением, в котором органически выковывается задача и к которому сводится созидательный процесс от начала до конца.

Вместо отвлеченного и крайне индивидуалистического вдохновения старого архитектора — современный зодчий твердо убежден в том, что архитектурная задача решается, как и всякая иная, лишь в результате точного выяснения неизвестных и отыскания правильного метода решения.

Зодчий видит вокруг себя смелое творчество изобретателя в разных областях современной техники, гигантскими шагами побеждающей землю, недра и воздух, с каждым часом отвоёвывающей все новые и новые позиции. Не трудно понять, что этот изумительный успех человеческого гения объясняется, главным образом, правильным методом творчества. Изобретатель твердо знает, что как бы ни был яростен подъем его творческого энтузиазма — он будет бесценен без трезвого учета мельчайших обстоятельств, окружающих его деятельность. Он во всеоружии современного знания, он учитывает все условия сегодняшнего дня, он смотрит вперед, завоевывает будущее.

Конечно, наивно было бы подменить сложное искусство архитектуры подражанием тем или иным, хотя бы

ПРОЕКТ

здания Московского отделения конторы и редакции газеты „Ленинградская Правда“, Москва, Страстная площадь. Архитектора А. А., В. А. Веснины. 1924 год.

Основная задача при проектировании заключалась в том, чтобы при данной минимальной площади основания здания (6×6 mtr) наиболее рационально разместить все необходимое для данного производственного процесса помещения и выразить в фасадах производственный и агитационный характер сооружения.

Здание спроектировано в 5 этажей из железа, стекла и железобетона.

I этаж — газетный киоск, помещение для сторожа.

II — читальный зал.

III — общая контора и контора объявлений.

IV и V этажи — редакция.

Подвал — отопление.

По фасаду на Страстную площадь спроектировано: витрина для текущих сообщений, установка для световой рекламы, часы, громкоговоритель, прожектор.

1

3.9: Alexander Vesnin (1883–1959) and Viktor Vesnin (1882–1950), Moscow Bureau of the Newspaper “Leningrad Pravda” Competition project, unexecuted. Moscow, 1924. Reproduced in *Sovremennaiia arkhitektura* (Contemporary Architecture) 1, 1925. Courtesy Beinecke Rare Book and Manuscript Library, Yale University.

3.10: Albert Robida (1848–1926), Headquarters of the Newspaper *L'Époque*, with twin circular urban screens From *Le Vingtième Siècle: La Vie Électrique*, 1883.

for the Turun Sanomat Building—the headquarters and printing works for a newspaper in Turku, Finland. In Aalto's delicate nocturnal drawing, a solitary worker intently reads an enormous illuminated projection of that day's paper which fills the entirety of the building's vast plate glass show window.⁴¹ A similar desire to combine illumination technology with a system for controlling and changing words and images motivated one of the most ambitious proposals for a media façade to emerge from this period. Avant-garde graphic design had begun to influence the design of neon façades in Paris, Amsterdam, London, and Berlin in the early 1930s, notably in projects for newsreel cinemas. Some of the most notable were Jan Duiker's *Handelsblad Cinéac* in Amsterdam (1933) as well as the numerous *Cinéac* cinemas designed by Adrienne Gorska and Pierre de Montaut in France, Belgium, and Greece. (Figure 3.11) The business model for such newsreel cinemas was to partner with local newspapers, who purchased the rights to use their names on the cinema façade, which served as a billboard that generated revenue for the cinema.⁴² While such compositions of neon lights could produce the impression of motion, they could not convey different images or change their messages from day to day. The French architect

41 See Pelkonen, p. 56. My thanks to Eeva-Liisa Pelkonen for drawing my attention to this drawing.

42 On the *Cinéac* chain, see Meusy, pp. 93–119.

Oscar Nitzchke developed his contemporaneous project for a *Maison de la Publicité* (1935) in a manner that sought to resolve this problem. (Figure 3.12) An admirer of Soviet Constructivism, which he had encountered at the 1925 Exhibition of Decorative Arts in Paris, it is unclear if Nitzchke knew of the Vesnin's Leningradskaya Pravda project.⁴³ Unlike the Pravda building or the Cinéacs, Nitzschke's project was not conceived for news but for an advertising publisher. Whereas the Pravda used a single portion of the façade for illuminated messages, preserving the rest as transparent glass, nearly the entire façade of the *Maison de la Publicité* was envisioned as a support system for signboards, neon letters, illuminated signage, posters, and projection screens.⁴⁴ Like the period's newsreel cinemas, the billboard-like quality of the façade was to generate revenue, yet here it was to change on a regular basis. And like the Vesnin's Leningradskaya Pravda, the project never got further than drawings and photomontages, a number of which Christian Zervos published in his journal *Cahiers d'art*. In a text on the project, Zervos stressed how the building itself had become a new kind of screen:

[Nitzchke's] very beautiful project for an advertising building realizes a screen on which powerful appeals for attention could move or be fixed. This screen allows them to become easily interchangeable, to play with them as on a keyboard, making it simple to change the forms almost instantly, as if by magic.⁴⁵

The screen in question is a system of optical display, yet Zervos's reference to the manipulation of interchangeable elements by keyboard highlights the façade's role as a means for controlling different technical media—type-based texts, continuous tone images, and linear graphics—through a single mechanism. In this sense, Nitzchke's façade was neither quite a billboard nor a movie screen. It sought to create a form of technical control that would only much later become a property of optical displays with the emergence of discretely addressable pixel grids characteristic of computer graphics.⁴⁶ The interchangeability of film, letters, printed images, and illuminated neon was not achieved by projection but by an ingenious architectonic system; the exterior surface of the building was a cross-braced, light metallic framework made up of tightly spaced horizontal tubes that provided electricity and

43 Abram, p. 75.

44 Zervos, p. 206.

45 Ibid., p. 207.

46 On this distinction, see Kittler, 2001.

3.11: Adrienne Gorska (1899–1969) and Pierre de Montaut (1892–1947), *Trois Salles Marseille at Night*, 1935. Digital image © RIBA.

anchorage points. The materials arranged on the façade would be produced on the building's top floor and then lowered into position by workers operating inside a metal armature placed roughly one and a half metres outboard of a sealed interior façade of glass brick.

With such a screen-façade, we see a starker separation of inside and outside than with the Vesnin brothers's *Leningradskaya Pravda*. As the entire façade becomes a fully controllable optical screen capable of handling advertising, film projection, and news, it also had to become a much more sophisticated environmental conditioning system. The mechanism supporting this interchangeable system of signs, letters, and moving images meant that window openings needed to be suppressed. The offices inside received light from the glass bricks, yet they were 'hermetically' detached from the outside, their interior atmosphere controlled by mechanical heating and air conditioning.⁴⁷ Across this thickened optical and atmospheric barrier, the structural rationalist tradition asserts itself faintly as the tripartite division

47 Abram, p. 68, Zervos, p. 207.

3.12: Oscar Nitzchke (1900–1991). *Maison de la Publicité Project*, Paris, France, *Elevation*, 1934–36. Ink, color pencil, gouache, and graphite on lithograph on spiral-notebook card stock. Gift of Lily Auchincloss, Barbara Jakobson, and Walter Randel. Digital Image copyright The Museum of Modern Art/Licensed by SCALA / Art Resource, NY.

of the metallic frame mimics the placement of interior columns, and the horizontal metal tubes echo the layers of glass brick. Such a façade was animated by the graphic elements produced or assembled in the interior, which were themselves dependent on an economy of advertising and attention that was not reducible to the building's literal insides. Just as the technical requirements of the media façade dictated the constraints, materials, and environmental systems of the building's interior, the screen envisaged by the *Maison de la Publicité* reversed the inside-to-outside communicational directionality assumed by theories of the façade since the eighteenth century. Amid such a reversal, this complex and layered display mechanism assumed a more literally human countenance: in all the views of the project Nitzchke created, the most prominent advertising feature is a female face. As familiar architectonic elements disappear, a surrogate physiognomy appears on this surface, a literal face whose condition of possibility was the more complete extension of urban exchange value into the vertical dimension of the building envelope.

Interest in the media façade was anything but a linear progression. Projects such as Vesnin's *Leningradskaya Pravda*, Buijs and Lürsen's *Vollharding*, or Nitzchke's *Maison de la Publicité* were forgotten for decades before they slowly resurfaced in the work of a younger generation in the 1960s. In the intervening decades, the architectural interest in nocturnal illumination proliferated in scope and intensity, yet it was largely detached from the aspiration to make technologically mediated façades for controlling changing arrays of images, words, and symbols. During the Second World War and in the years immediately following, proponents of the 'New Monumentality' such as Sigfried Giedion, Josep Luis Sert, and Fernand Léger advocated for the role of large-scale projections in the design of new civic centres demanded by postwar reconstruction. Distinct both from the pseudo-monumentality of the 1930s and from the commercial façades of the metropolis, they envisioned a 'lyrical' monumentality characterized by buildings whose large blank surfaces were like screens ready to receive abstract projections of moving colours and forms.⁴⁸ While such vast complexes did not emerge as envisioned by Giedion, Sert, and Leger, the role of electric light indeed became more integral to the external appearance of corporate office buildings such as Skidmore Owings and Merrill's (SOM) *Manufacturer's Trust Bank* in New York (1955) or Ludwig Mies van der Rohe's *Seagram Building* (1958). Yet these extensively glazed buildings were neither projection screens nor surfaces for communicating with changing pictures and letters. Those architects who

48 See, in particular, Sert, Leger, and Giedion's 1943 manifesto 'Nine Points on Monumentality'.

would begin to re-engage the kinetic pictorial and textual qualities of the media façade during the second half of the 1960s were linked by a shared antipathy to such late modernist buildings.⁴⁹ Robert Venturi and Denise Scott Brown would stake their position against the modernist privileging of form over ornament and communicative elements through their desire to learn from the billboards, strip hotels, and dazzling, electronically controlled 'electrographic architecture' of Las Vegas.⁵⁰ It was not simply a question of recovering interwar designs for media façades but of the different significance these façades acquired in the 1960s. Whereas Vesnin, Nitzchke, and Duiker sought to integrate a vocabulary of abstract forms and rationalist structure with the culture of news and publicity, Venturi and Scott Brown mobilized the iconographic and popular aspects of such media screens against the hegemonic role assumed by late modern architecture. The giant screen was particularly apt, they argued, for suburban postwar America with its dependence on automobility. Such an argument was part of their larger critique of the modern movement's subordination of façade to interior organization, a legacy which, they argued, had given up the architect's freedom to vary different façades in relation to the specific requirements of urban context.⁵¹ Such an interest was particularly evident in their 1967 competition entry for the National Football Hall of Fame, whose façade was an electronic billboard designed to be visible from the highway. (Figure 3.13) Like the era's drive-in movie theatres, the Football Hall of Fame was a building that could be watched from the parking lot. The interior of the museum was spatially subordinated to such a screen-façade; its vaulted hall, running perpendicularly behind its façade, served both as a buttress for the façade and as a linear exhibition space replete with multi-media displays that included film projections, objects, and illuminated graphics. However much Venturi and Scott Brown played with the iconography of the drive-in, the façade was not a movie screen. Rather, it adapted systems first used for advertising signs and news tickers and later employed in stadium scoreboards. To be made up of 200,000 electronically programmable lightbulbs, it was to produce 'moving sequences of naturalistic images, words, phrases, and diagrammatic choreographies of famous football

49 Sybil Moholy-Nagy played an important role in bringing Nitzchke's project back to attention in the later 1960s; see Abram. In this context, it was interpreted as a precursor of rubric of Pop, rather than for its innovative media systems. The project was also invoked in the debates over the politics of Pop between Kenneth Frampton and Denise Scott Brown. See Frampton, 1971 and Scott Brown, 1971.

50 See Venturi, Scott Brown, and Izenour, 1972.

51 Venturi, 1966, p. 118.

3.13: Venturi, Scott Brown and Associates, National Football Hall of Fame Competition, 1967. Photograph of model. © Venturi, Scott Brown and Associates.

plays'.⁵² The desire was for a programmable face, one capable of consolidating control over formerly distinct elements of letter, picture, and diagram.

The London-based Archigram group also took a major interest in developing an architecture of the media screen during these years. Rather than seek to re-engage the façade with a more popular repertoire of signs explored by Venturi and Scott Brown, they gravitated to the technological affordances of contemporary screen technologies. In not less than a dozen projects between 1963 and 1972, the group envisioned screens in a dizzying variety of roles: as interior partitions, frameworks for ephemeral audio-visual events, pneumatic membranes for living capsules, public feedback mechanisms, subterranean entertainment centres, or mobile, networked, audio-visual educational systems.⁵³ In the group's *Instant City* project (1968-1972), provincial towns, villages, and suburbs were to be 'bombarded' with an expanding catalogue of 'environ-poles', pneumatic enclosures, and hybrid screen robots delivering a dose of metropolitan intensity by truck or hovering airship before being packed up and moved on. Rather than fixed in place like billboards, the screens of *Instant City* were multi-part assemblages, coming together to form freestanding audio-visual 'arenas' or affixing themselves temporarily to extant façades. (Figure 3.14) Indeed, in such projects, any concern with the façade-as-barrier seems to have disappeared; the various screens and

⁵² Venturi, Scott Brown, and Izenour, p. 117.

⁵³ For an account of Archigram's screen architecture, see Buckley, 2019.

media elements create relations of attraction and attention rather than divisions between interior and exterior. Multi-part, ephemeral, and temporary, Archigram's screens articulated a diffuse landscape in which mobile spectators 'tuned into' the array of screens the way one might tune into a television channel.⁵⁴ Such screen systems were conceived to be portable. Even more so, they aimed to catalyze emerging forms of virtual mobility; the multi-directional movement of audio-visual information and messages across a network of towns was to transform a given location by accelerating the adoption of tele-communication links to other places.⁵⁵ The screens that serve as the face for such projects emerged amid particular struggles over the function of emerging audio-visual technologies, the qualities of vernacular landscapes, and the legacy of the modern movement, yet they also share something of the autonomy of the face from the interior which had characterized the opaque screens of early modern palace fronts. Even as these post-modern screen-faces take on the guise of a human countenance, they loosen any integral relationship with a body or soul. Yet the opaque screens of the 1960s are less a historical return than they are a reconfiguration, in which the face paradoxically came to mark a non-identity between inside and outside. In so doing, façades acquired a different set of purposes.

Convergence, information, place

It is worth turning now to the project that Heausler and others have pointed to as an 'origin' for the contemporary media façade, in order to emphasize how far along it appears within a genealogy of the screen. One of the historical ironies of Renzo Piano and Richard Rogers's winning entry for the Centre Beaubourg competition is that while the media façade played an important role in their winning the competition, the proposed large-format screen was eliminated during the design development process and was never constructed. Rather than a unified origin, we are looking at the conflicted relationship between design intentions and real technical and political constraints as these were negotiated in the translation of a public competition into a building.⁵⁶ (Figure 3.15) Two key shifts can be highlighted

54 Archigram, 1972, p. 96.

55 When first presenting the project in *Architectural Design*, the group explained that the arrival of *Instant City* was to be 'the first stage of a national hook-up. A network of information-education-entertainment-"play and know yourself" facilities'. See, Archigram, 1969, p. 277.

56 Heausler, 2009; see also Foth, Brynskov, and Ojala, pp. 41-42.

3.14: Archigram (drawing by Peter Cook), *Instant City Program*, 1970. © Archigram.

relative to the media façades encountered thus far. The first concerns screen's relationship to information and the second its relationship to place.

When French President Georges Pompidou announced the competition in December of 1969 for the largest cultural centre to be realized in Paris since the 1930s, it was under an explicitly interdisciplinary banner. The goal was integration; a single complex was to house a large public library, a museum of contemporary art, a centre for experimental music, and a centre for industrial design. Piano and Rogers's entry responded to the competition brief by proposing not an updated museum but 'a "Live Centre of Information" covering Paris and beyond'.⁵⁷ Screen façades were crucial to envisioning the concept. Piano and Rogers described their visualization of the screen façade as a site for the convergence of multiple, formerly distinct entities into a single surface of appearance, relaying 'constantly changing information, news, what's on in Paris, art works, robots, television, temporary structures, electronic two-way games and information, etc.'.⁵⁸ Much like Nitzschke's drawing of the *Maison de la Publicité*, of which the team was

57 Ibid. The building has since been the subject of several monographs. See Piano and Rogers, 1987; Silver, and Dal Co, 2016.

58 Piano and Rogers, 'Competition Statement', cited in Crompton, 1977.

3.15: Renzo Piano and Richard Rogers, with Arup Engineers, Competition Entry for the Centre Pompidou (West Elevation), 1971. © Piano + Rogers, courtesy of Rogers Stirk Harbour + Partners; Fondazione Renzo Piano and Centre Pompidou.

aware, the Pompidou screen looked to assimilate heterogeneous technical media—words, projections, neon, and banners—into a single surface encompassing the entire façade. The photomontage submitted to the competition indicates how technically and formally this role has changed. The solvent transfer technique used by the architects endowed drawing, letters, and photographic media with a consistent quality, their material differences dissolving into the substance of paper just as distinct media channels were to merge into an electronic mosaic.⁵⁹ Literal human faces again dominate the façade, yet these are no longer advertisements. The largest profiles, of two female guerrilla soldiers, evoking the ongoing war in Vietnam, were an indication of the televisual images to be displayed on the building. These surmount a separate, panoramic view of a crowd scattered in a field. Such a field appears, in turn, above a horizontal news ticker telegraphing brief phrases and to the left of a large-scale visualization of the world as map. The convergence of various different technical media was visualized in terms of an emerging logic of the pixel grid, yet this convergence was also an effort to highlight the coming together of different information sources, from local information and projections to coded signals received from around the globe by virtue of the massive satellite dish crowning the elevation.⁶⁰ Where Nitzchke's façade brought together distinct technical media under the rubric of *publicité*, Piano and Rogers promised greater access to, and control over, 'information'. Here, the term 'information' was deployed in a sense descended from the mathematics of information theory, an approach that treated any number of messages from the vantage point of signal transmission, discarding their cultural and semantic differences. Piano and Roger's information screen aspired to a degree of neutrality; unlike 'publicity', 'information' was ostensibly separate from persuasion and was instead something to be scanned and interpreted with distance and detachment. Both the flexible, wide-span steel framework within and the information screen without sought to resolve a key tension of the competition brief: to support an effort to break down cultural hierarchies while at the same time allowing for an open-ended reintegration and programming of 'productive' relations between

59 I would like to thank Mike Davies in the office of Rogers Stirk Harbour + Partners for archival information concerning the drawing.

60 Scarcely legible toward the bottom of the drawing, one can make out the phrase: 'Caroline, go to canvas city immediately—your friend Linda has been busted', suggesting that portions of the screen were to function as a public-address system for individual messages. The text fragment was clipped from the headline of a critical article in *Architectural Design*, penned by Martin Pawley in 1970, on the chaos surrounding that year's Isle of Wight Pop Festival. See Pawley, 1970.

these formerly separate elements.⁶¹ As a number of critics, including Jean Baudrillard, Alan Colquhoun, and Annette Michelson, noted at the time, the rhetoric of information and its placement as the key element of a new cultural centre was anything but politically neutral; rather, it aimed to replace a modernist commitment to aesthetic autonomy with a managerial model of creative programming and a consumerist model of choice.⁶²

The proposals for media façades seen so far in the twentieth century were envisioned for newspaper headquarters, worker's cooperatives, and advertising firms—that is, small-scale private enterprises or civil society organizations. However much the cultural model of the Pompidou mirrored aspects of the liberal consumer economy, it was, at the time, the largest state-sponsored cultural commission in post-World War II France. Here, the screen must be understood not as a loss of materiality but as an integral part of the larger urban demolition and redevelopment project essential to restructuring a key urban node within a plan for the overall metropolitan territory. The unprecedented size of the screen was a factor of the enormous site, which was available only due to the state's highly controversial decision to demolish and redevelop the nearby Les Halles market. It is for this reason that the project's media façade risked being seen from the beginning as a surface that dissimulated state messaging, no matter how open, informational, and indeterminate its programming.

The media faces envisioned on the western elevation of the Centre Pompidou did not simply seek to capitalize on the latent value of attention existing in urban circulation; it aimed to use this enormous screen to produce a new kind of public space.⁶³ Piano and Rogers's competition project stipulated a plaza that would face the screen and be roughly equal in size to the building's footprint. Screen and plaza were assembled into a perpendicular co-dependence. The sloped public square was designed to emulate the raked floor of an auditorium, yet the relation of public to screen is something other than that found in the

61 The competition brief stated: 'The meeting, in one place, of books, the fine arts, architecture, music, cinema and industrial design [...] is an idea of great originality. This confrontation should enable a far greater public to realize that although creativity affects an appearance of liberty, artistic expression is not inherently autonomous, its hierarchy is merely fictitious, and that there is a fundamental link between today's art forms and the productive relations within society.' 'Centre Beaubourg Competition Brief,' 1977.

62 'The organs of culture,' Alan Colquhoun remarked, 'were now to be reduced to a single entity, the prototype of which was the self-service store—the emblem of the liberal consumer economy'. Colquhoun, 1977, n.p. See also, Baudrillard, 1982 and Michelson, 1975.

63 Such a turn anticipates what more recent discourse on urban screens has come to call 'digital place-making'. See for instance the texts gathered in Foth, Brynskov, and Ojala, 2015; and in Hespanhol et al., 2017.

cinema. The relationship was constituted by and across Piano and Rogers's exposed metallic frame, a device technically reminiscent of Nitzschke's layered media façade. Here, the structurally integral external grid was populated not by advertising workers but by promenading visitors, locating the audience both before and within the physical space of the screen façade. Given the controversy surrounding the commission, it is not surprising that the architects took pains to suggest that such screens were not 'façades, properly speaking', adding that the 'transparency and sense of scale result mainly from the activities within the metallic skeleton' (*ossature métallique*).⁶⁴ Drawing on anatomic metaphors descended from Viollet-le-Duc, the architects insisted that the screen was transparent not only in a literal sense but also in its appeal to a reasoning and reasonable public, as it rationally exposed the principles of indeterminate and open programming taking place behind it. Yet such claims glossed over the complex historical transformation taking place. The distinct separation of the visual content of the façade—channelled by the principles of an emergent computer interface and composed from a changing array of images, texts, and graphics—and the disposition of the interior spaces was characteristic of a type of public image akin to the opaque screens of an earlier modernity. From this longer historical perspective, the paradoxical status of the Pompidou screen becomes clearer; its claims for literal, informational, and institutional transparency rested on a more subtly opaque and arbitrary detachment between inside and outside.

The very real technical difficulties that Piano and Rogers, together with the engineering firm Arup, encountered in seeking to realize the imagined screen façade remain important. After 1971, the technical requirements of the massive display systems proved more difficult than the logistical, fabrication, engineering, and political complexities of the building's remarkable steel structure. The design team turned first to the sort of programmable bulb-based systems used for Olympic scoreboards, yet the costs for producing and maintaining these for even a small portion of the proposed surface proved prohibitive.⁶⁵ Large-scale Eidophor projectors, of the kinds used in control rooms, as well as more recent laser systems developed by Hitachi for Osaka '70 were explored, yet none could achieve satisfactory results in daylight. Billy Klüver, the former Bell Labs engineer and co-founder of Experiments in Art and Technology, was invited to assist and proposed a lenticular screen, a surface made up of thousands of individual reflective disks that was capable

64 Piano and Rogers, 1977.

65 Nathan Silver provides an overview of the demise of the audio-visual systems. See Silver, pp. 162-164.

of operating in daylight.⁶⁶ Yet even the largest of such screens would only be visible from very specific viewing angles and could not exceed twenty by thirty feet. By the mid-1970s, the screen was quietly dropped from the project, even as the team held out hope for future realization. In addition to technical limitations, some members of the team believed that, ironically enough, it was a political reticence—particularly the uncertainty about who would control the information coursing across the face of the French state's most visible cultural institution—that helped bring about the screen project's demise.⁶⁷

In the years following the completion of the Pompidou in 1977, the questions of interaction and control associated with the large audio-visual façades became more technically feasible. By the mid-1980s, large-scale Cathode Ray Tube screens such as Sony's Jumbotron were realized, and by the early 1990s, innovations in LCD and LED technology for lighting and displays laid the foundation for the current technologies used in billboards and media façades. The greater accessibility of these technologies, together with the steady decrease in LED prices since 2000, has contributed to the expansion of media façades around the globe. Yet technology and economics are not sufficient to explain this phenomenon.

As the techniques for realizing media façades became increasingly viable in the 1980s, their cultural connotations were refracted through a darker lens. One of the enduring popular images of such a shift can be found in Ridley Scott's film *Blade Runner* (1981), in which massive media façades again carry faces that speak and move in the permanent gloom of a dystopian future. (Figure 3.16) Architectural critics also expressed distinct wariness about the effects of such a transformation.⁶⁸ For someone like Paul Virilio, who was one of the first to theorize the incorporation of electronic displays into architecture in the 1980s, the key problem was neither spectacular deceit nor authoritarian control. The integration of such optical screens with telecommunication was about a fundamental loss of face, a breakdown of the terms through which a stable spatial difference could be marked. 'The screen interface (computers, television, teleconferencing)', he argued, produced a form of 'visibility without direct confrontation, without a *face-à-face*, in which the old *vis-à-vis* of streets and avenues is effaced and disappears'.⁶⁹ In an interview with Jean Nouvel, he addressed the problem

66 Midant, p. 135.

67 See Banda, pp. 140-141.

68 For an index of this debate, see the articles by Martin Pawley, Paul Virilio, and Vilem Flusser in the special issue of *Arch+* devoted to façades.

69 Virilio, 1988, pp. 17-18.

3.16: Ridley Scott (director, b. 1937), Frame enlargement from *Blade Runner*, Warner Brothers, 1982.

of the media façade directly. With the potential to incorporate electronic display technologies into building surfaces, he argued, ‘everything can be contained in the façade. The boundary was what separated one world from another. Today the world can be completely contained in that boundary’.⁷⁰

Virilio theorized the urban screen interface as part of a technological lineage running from the magic lantern to cinema, television, and computer screens. His analysis, as Anne Friedberg acutely observed, remained in a metaphoric register, disinterested in the technical and historical specificity of different kinds of screens.⁷¹ For Virilio, it was most urgent to think of the screen as a site of loss, whether it be the collapse of presence, of dimension, or of the ability to distinguish inside from outside. Virilio reminded us of the profound difference between the logic of the interface and that of the façade at the very moment when these were being aligned. The former creates relations between things that can no longer be judged according to inherited categories of space and time; the latter serves as a boundary that continues to reference the distinction between interior and exterior, surface and depth. Such a critique remains important amid the current proliferation of screens, particularly as media façades are readily promoted as the bright ‘new face’ of a ‘massively digital urban design’.⁷² Yet Virilio’s critique relies on

⁷⁰ Nouvel, p. 105.

⁷¹ Friedberg, p. 182.

⁷² Barker, p. 6.

an overly teleological schema, in which the outcome of optical technologies and their accelerating links with telecommunications carry predictably deleterious results. Just as pertinently, in presenting the mediated screen interface as the antithesis of the directness of face-to-face encounters, Virilio presumes a directness and integrity of the face that downplays its role as media. As Nikos Papastergiadis, Amelia Barikin, Scott McQuire, and Audrey Yue have helpfully argued, in order to consider the public role of urban screens, the traditional emphasis on face-to-face relationships as constitutive of the bourgeois public sphere might be rethought in light of increasingly prevalent face-screen-face relationships.⁷³

The media façade combines the seemingly incompatible functions of face and interface; it is at once a technology whose actions relate humans and machines, connecting things disparate and distant, while also operating as a physical surface that constructs and controls the spatial relationships between inside and out. Rethinking the media-architectural genealogy of the face-façade relationship provides an opportunity to hold onto the strangeness of the media façade in the era of its banalization. Yet it might also help to critically retrace the historically changing functions and roles for the human face: an entity that, increasingly, does not simply look at an environment of screens but is being produced by them.

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73 Papastergiadis, Barikin, and McQuire, pp. 4-5.

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