Ephemeral Studios

Exhibiting Televisual Spaces during the Interwar Years

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Studio productions are central to television's history in the early postwar period. As William Boddy has shown for the United States, the live teleplay in anthology format, made almost entirely in studio settings, was the centerpiece of critical attention until the mid-1950s. The shift to Hollywood-sponsored film series shot on location included a shift from a theater-based to an entertainment-based model for television prime-time programming, which constituted a "repudiation of the aesthetic values" critics had endorsed so far.¹ Similarly, Gilles Delavaud has argued that the French studio *dramatiques* represented a major genre for early TV insofar as they offered a platform for creative experimentations. The drama promised to materialize television's specificity as immediate and intimate communication while simultaneously uplifting the new medium to a new art form.²

While production spaces are thus understood to be part and parcel of the negotiations of cultural values and media identities during television's postwar years, the history of interwar studios remains largely unknown. More broadly, television's development in the interwar years has received comparatively little attention.³ This observation contrasts with the medium's visibility in public space during the 1930s, when television was discussed in the general press and professional journals and regularly shown at exhibitions and industrial fairs. Although interwar television was not yet commercialized as a mass medium for broadcasting to a national public, it encountered a mass audience by offering itself as a media object on display.⁴ From the late 1920s on, various televisual devices, including large-screen television and visiophones, were regularly shown in larger cities at events such as annual radio trade fairs, national exhibitions, and world's fairs. Similar to the descriptions published in journals and the press, these "television"

exhibitions" constituted a mediating link between the scientific laboratory and the living room. They offered a space for the first encounter between the medium and its audience and familiarized the latter with the former's potentialities.⁵

A crucial feature of television exhibits during the period was the "studio," a more or less sophisticated space dedicated to televising a live performance. Already the first television exhibitions in the late 1920s included a studio room, integrated into broader television displays and constituting one—often the major—attraction at the exhibition booth. Contrary to permanent studios, exhibition studios were built to be disassembled: their ephemerality corresponded to the exhibition's own temporality as a fleeting event for the celebration of consumer culture and new technology.

Drawing on exhibitions held in Great Britain and the United States, this essay analyzes studio displays to propose new insights into the history of a largely unknown medium and explain how ephemeral studios helped shape the identity of interwar TV. As I will argue, television's materiality, more than its content, introduced television into public space, and the studio production site, as a physical structure, constituted an essential component for the making of television in the 1930s. Importantly, the accessibility of exhibition studios allowed institutions from the mid-1930s on—here, the British Broadcasting Corporation (BBC) and the National Broadcasting Corporation (NBC)—to play the card of transparency and to invite their potential audience to peek behind television's scenes. The ephemeral studio nourished the "corporate identity" of the new medium and contributed to its smooth integration into preexisting broadcasting institutions. Familiarizing the audience with television's infrastructure, it constituted the heart of the televisual experience for fairgoers and thus represented a central space for television's encounter with its first audiences.

DEMONSTRATING TELEVISION'S SPACE-BINDING CAPACITIES

Speculating about the medium's potential in 1935, Rudolf Arnheim described television as a "pure means of transmission" that lacked "the elements of an original artistic elaboration of reality" but "modified our relations with reality itself":

We see the people gathered together in the central square of a near-by city, we see the head of the government of a neighboring state, we see boxers fighting for the world's title on the other side of the ocean, we see an English jazz band, an Italian soprano, a German professor, the burning members of a train that has collided, the masked figures of carnival. . . . We can admire the sun setting behind Vesuvius and a second later the illuminated night-signs of New York. The need for the descriptive word disappears as the barrier of foreign language vanishes. The world in all its vastness comes to our room.⁶

According to Arnheim, television's space-binding qualities produced a map of events and sites that appeared simultaneously on the screen. Abolishing the need for linear textual description, television's new visuality recreated the world in the intimacy of domestic environments and generated a new topography in which private and public space merged.

These properties, presented as fundamental to television, echo the discursive construction of the medium as a "window on the world" that emerged with the first televisual utopias from the 1870s on. Privileging remote visuality associated with the capacity of instantaneous vision, nineteenth-century imaginaries helped shape the televisual paradigm of immediacy, presence, intimacy, simultaneity, and ubiquity. Albert Robida's "Telephonoscope," described in his science fiction novel *Le vingtième siècle* (1883), or George du Maurier's *Edison's Telephonoscope* (*Transmits Light as well as Sound*) (1878), translated the early conception of the televisual medium as capable of annihilating space by time. Like the telephone, to which it remains closely associated, but improving its solely audio function, the televisual device transports its user instantaneously—and *audiovisually*—to faraway places. In *Le vingtième siècle* the telephonoscope broadcasts the latest news, but also opera performances, directly into the living room; in du Maurier's caricature the parents are able to hear and see their offspring in the British colonies.⁷

This dematerialized idea of television as a means of almost ethereal communication clashes with the technological constraints—and the simple heaviness—of televisual infrastructures, for sending images "through the air" requires an important setup involving production spaces, transmitter, and receiving equipment. Throughout the interwar period the development and maintenance of this infrastructure represented a major challenge, even for established players in the telecommunications field. The first mechanical—low-tech—devices were comparatively cheap to develop and simple to handle but also had all the disadvantages of an unreliable device of inadequate quality and limited program value. They required bright light and makeup, for instance, making outdoor broadcasting nearly impossible. While the development of electronic cameras based on cathode-ray tubes promised to solve many of the quality-related problems, the research costs increased drastically, pushing most of the independent engineers and inventors out of the race.8 In addition, the production of television programs remained an infrastructural challenge that required the instantaneous coordination of men and machines. As one NBC engineer explained in 1939, the most important aspect in television production was "timing," and more precisely, the "accurate timing" not only of "devices and split-second movements of cameras" but also of "personnel." Contrary to the popular imagination that projected uses of dematerialized communication, "seeing at a distance" depended on technical systems and human resources working together in precise coordination.

By organizing television displays from the late 1920s on, inventors and corporations demonstrated their capacity to master the complexity of televisual

communication and to overcome technical problems and economic restraints at least for the duration of an exhibition. By making television work in these settings, they promoted their own status in the field of telecommunications. The public display of television therefore primarily celebrated the technological feat materialized by a televisual transmission: the demonstration served as proof of technological progress and innovative strength.

To stress the technological accomplishment represented by a televisual transmission, the entire apparatus had to be shown. Only a mise-en-scène that placed the studio and the TV receivers in vicinity would allow audiences to observe the particularities of a televisual transmission. At the New York radio fair in 1929, for instance, the Radio Corporation of America (RCA) organized a display that invited an immediate comparison between the live performance and its televised image. The one-square-foot-large screen and the actors' stage "were so arranged that the spectators could compare the original scene and the received image."10 Similarly, Ulises A. Sanabria, a key figure for the public showing of large-screen television in the United States, staged a reflexive setup in which the televisual demonstration relentlessly pointed toward itself.11 The demonstration, organized in 1931 at the New York Moss Theater, was announced by the New York Times in some detail: "the entire television apparatus, including sending and receiving equipment will be in operation during each variety program at the Moss theatre. The television transmitting booth will be wheeled out on the stage. Suspended above the stage will be the ten-foot translucent screen on which the images will be shown. Thus, the actors will be seen by the audience both as microphone and television eye pickup their voices and images, and as they appear on the television screen suspended above." Highlighted in the press, the key aspect of the demonstration was allowing the audience to visualize at one glance the apparatus, the performance, and its televised image, all aligned in the same field of vision. The screen itself, "translucent" and hanging from the ceiling above the equipment, revealed nothing more than the immediate surroundings of its own location. The performers' live act and its mediation on the screen created the spectacle of a technological doppelgänger compared immediately to its "original": production and reception space together produced a mirror effect in which television looked at itself.

In other words, early television demonstrations gave prominence to the televisual infrastructure: the new medium's material "stuff," rather than its content, was brought to the fore. Instead of pushing production spaces backstage, these spaces—and their technologies—were enthusiastically shown. To use the terms of Jay D. Bolter and Richard Grusin, the displays depended on "hypermediacy," which, instead of staging an older medium (as in Bolder and Grusin's model), staged itself. By "mak[ing] us aware of the medium," they stressed their own materiality and self-referentiality.¹³

In doing so, televisual settings at the fairs pointed back toward the televisual system and its bulky materiality: instead of providing a "window to the world" that transgressed the spatial borders of the display, they accentuated the opaqueness of a televisual loop. Raising awareness of the medium, this reflexive strategy emphasized the spatiotemporal configuration of *simultaneous* transmission *at a distance* while remaining limited to the microspaces of the exhibition halls. Within these spaces, production and reception were intrinsically linked and, *together*, constituted the main attraction. To demonstrate "seeing at a distance," the distance was made graspable for visitors: as an exhibit, television called for a reduction of its scale from (imaginary) global broadcast to literal narrowcast.

GLASS STUDIOS

Sanabria's 1931 exhibition emblematized early television demonstrations by creating a spectacle that unveiled—and thereby celebrated—the entire televisual infrastructure. Here, the "studio" space did not exist independently from transmission and receiver equipment. Pursuing comparable strategies of mise-en-scène with more elaborate means, other displays emphasized the presence of an ephemeral studio by installing glass-windowed production spaces. Creating a distinct architectural space within the exhibition halls, these studios drew attention to the television equipment while also protecting cameras, lighting grids, and other equipment, as well as technicians and performers, from curious crowds. Similar to balustrades and cordons regularly used to shield the objects on display, the transparent surface offered visual—but not tactile—access to delicate materials and its exhibitors.

In 1929, for instance, television inventor and entrepreneur John Logie Baird organized a show in London to run in parallel with the national radio fair Radiolympia. Baird's transformed garage included a demonstration space hosting receivers, the studio, and the control room, the latter two shown behind windows. An exhibition map published in the journal *Television: The World's First Television Journal* highlighted the "glass windows" separating the visitors' space from the studio and the control room (fig. 3.1), and the journalist's written account insisted on the "wide expanse of plate-glass," which opened onto a "sound-proof-room."

While the "televisual" space was thus clearly separated from the space of reception, the glass also allowed "for one to watch the engineers at work." To the right of the modestly equipped glass studio, two television sets were positioned (fig. 3.2). Given the small screen size, only one person at a time could see the image: "public gangways" installed in front of the receivers canalized the visitors into a disciplined line. Separated from the crowd filling the space, the visitor was prepared to view the display and simultaneously made part of the spectacle for other visitors in the room. In addition, one gangway was elevated "in order that everyone might

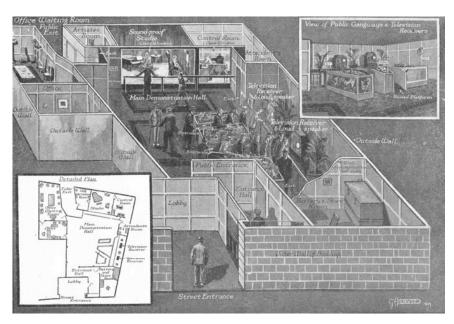


FIGURE 3.1. Map of Baird Company's 1929 exhibition adjacent to the London radio fair Radiolympia. *Television* 2 (Dec. 1929): 474.

have a perfectly clear view of the artists at work in the studio and in turn compare them with the televised image." Standing a little higher than one's television-watching neighbor, one could compare the studio performance "with the television image as seen in the Baird Televisor receivers."

This juxtaposition of a live performance with its televisual reproduction recalls earlier public performances of sound technologies demonstrating the fidelity of audio recording. As Emily Thompson has described, from 1915 to 1925 the Edison Company conducted similar "tone tests" throughout the United States. Aiming to convince the audience that live music and phonograph recordings were comparable, these tests paralleled singers and recordings by switching between the live performance and the phonograph. In highly standardized demonstrations sometimes introduced by Edison himself, the singer would stop singing while his or her voice continued to resonate on the phonograph, or the lights would be turned off and the audience left guessing who was playing: the human voice or the machine. While earlier public demonstrations of phonographs had emphasized the functioning of the machine to prove that "it worked," the tone tests shifted the attention to the equivalence between original and imitation and sought, as Jonathan Sterne writes, "to erase the medium (ironically, by highlighting the technology)." In audience of the medium (ironically, by highlighting the technology).

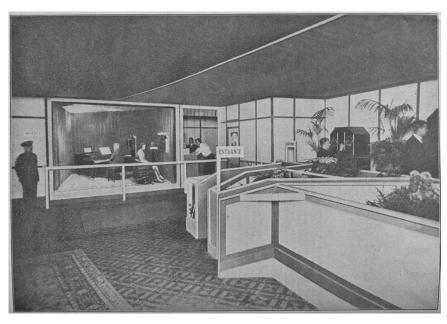


FIGURE 3.2. A 1929 display by the Baird Company with a glass-enclosed television studio and television sets (on the right). Leslie Trenton, "Now! Where Do We Go from Here?" *Television* 2 (Nov. 1929): 452.

According to the journalist quoted above, the exhibition design of Baird's display sought to establish an analogous equivalence between performers in the studio and their images onscreen. Given the size of the television screen, however, the comparison "at one glance" between the show and its transmitted image, as well as the possible confounding of the two, seem an impossibility. Rather than creating a visual equivalence by erasing the medium, then, television's "fidelity" depended on the possibility of authenticating the medium's space-binding potential made possible by the infrastructure's microscale within the exhibition hall. As in Sanabria's display, the exhibition of technology—including television receivers, a control room, and a small studio—constituted the core of Baird's demonstration and created a reflexive scenario in which television endlessly pointed to itself.

In the case of Baird's exhibition, and thanks, as well, to the extensive reporting in the journal *Television*, the glass studio gained an additional meaning. Anticipating, as the journalist wrote, "the B.B.C studio of the future," the large glass panes that offered a view of the studio and the control room promised a surplus of visibility: they made accessible production spaces that had not even been built. The architecturally created transparency was enhanced by the publication of maps describing those rooms that were closed to fairgoers (see fig. 3.1). Suggesting openness and clarity, the window and

the maps revealed production processes that would remain hidden or even nonexistent outside the exhibition halls. In a way, then, the settings at the fairs and on paper produced the visibility and visuality lacking in the medium on display, which merely demonstrated its own capacity for transmissions at a distance.

TRANSPARENT INSTITUTIONS

The exhibitionary *and* exhibitionist gesture of celebrating television and revealing the workings of usually invisible apparatuses and their engineers became particularly important with the introduction of public broadcasting in the mid-1930s, when television institutions began to advertise their regular broadcasting service on the exhibition grounds. The windowed space that revealed transmitters and studios exposed the machineries of a new medium and invited fairgoers to familiarize themselves with the production processes of institutional television, providing a space in which education and entertainment overlapped.

In Great Britain the Selsdon Committee, appointed to discuss the future of British television, published in January of 1935 its final report, which treated every aspect of television's development.²³ Among other things, it recommended that the BBC be responsible for the programs and for starting service with two competing TV systems provided by Baird Television and Marconi-EMI. Subsequently, the better scheme would be chosen as the definite standard for Britain's public service. In this regard the committee ruled that the future public service should transmit its programs over a "high-definition system" consisting of an image composed of at least 240 lines and 25 frames per second, a decision that would eventually help the firm Marconi-EMI (working with all-electronic technology) to win the competition.

The official opening of the television service, scheduled for November 2, 1936, was preceded by a test run at the national radio fair, Radiolympia, held in September, where the public could for the first time see the television programs transmitted from the Baird and Marconi-EMI studios located in Alexandra Palace. Produced outside the exhibition halls, the television program was not shown in the making, since BBC's exhibition design comprised only demonstration booths with television sets but no studio space. Through this exhibition format the BBC positioned itself as the responsible program institution even before launching its regular broadcast. But the sole staging of television as a program supplier had its drawbacks: the fairgoers' constant movement did not match the format of presentation, which accentuated television's content. As one BBC staff member wrote after the radio fair: "It was impossible to design a programme satisfactory for conditions at Radiolympia where the audience was continually being pestered and herded through the booths, and unable to observe for more than about a minute, at best about three minutes. Any performance with a theme and continuity was meaningless."24 Given the small booths and high number of visitors, the demonstrations had



FIGURE 3.3. BBC's exhibition studio at Radiolympia, 1938. Alexandra Palace Television Society.

to be very short: because viewers had only a few minutes to appreciate the media content, programs with narrative coherence were not convenient. For the BBC staff the decision to focus solely on television's content was, in retrospect, a mistake. In 1937 the exhibition architecture was changed slightly to allow visitors to witness the entirety of a "small programme," comprising talks and other studio productions, as well as a *Television Demonstration Film*. The film featured around thirty performances, interviews, and outdoor broadcasts, covering, according to the fair catalogue, "the most successful items televised during the first six months of the service." ²²⁵

The following year, however, BBC revised the exhibition format entirely, shifting its focus from programs to production. For this edition the radio broadcasting theater, "hitherto almost an institution," was replaced by a television studio "with glass observation windows three feet high" encircling the studio on two sides (fig. 3.3). A similar studio had already been erected in the spring of 1938 on the occasion of the *Ideal Home Exhibition*, a consumer fair for the modern housewife. Its reintroduction at Radiolympia confirmed the studio's effectiveness for communicating with the public. While the BBC's television signal radiated from its studios in central London toward the Greater London area, the slow distribution of receivers hindered the broadcast from effectively reaching its audience. The exhibition studio and its on-site productions, however, were seen by throngs of visitors, despite an additional admission fee to the BBC stand.

Each corner of the studio was equipped with one set, comprising a small décor for fashion shows, a ship-like structure for the variety show *Cabaret Cruise*, and a stage for *Queue for Song*. These shows were not only transmitted via a closed-circuit broadcast within the exhibition halls but broadcast as part of the regular BBC schedule, confirming the institution's will to give "a replica of actual working conditions" at Radiolympia.²⁹ The arrangement placing all studio sets in a corner was partly to accommodate the constraints imposed by an exhibition space whose goal was visibility: by pushing the decor to the wall, the studio made its interiors visible to visitors behind the glass windows. But it also reflected a more general practice in studio design. As Jason Jacobs has discussed, the "*centrifugal* organization" of production spaces was typical for early television studio architecture.³⁰ By erecting the sets on the sides, space was left for the cameras, cables, floor lighting, microphone beam, and movement of the entire crew.

Television's display at the fair was accompanied by several new features underlining the medium's growing importance for the BBC and the radio industry alike. In 1938 the cover of the fair catalogue referred for the first time not only to radio and its entertainment value but also to television by showing a "solid and substantial-looking eye, but the mere filmy ghost of an ear." Furthermore, concurrent with the opening of the exhibition, the BBC put on sale a "pictorial booklet" titled *And Now: The BBC Presents Television to the World.* On thirty-two pages the pamphlet, "almost entirely devoted to pictures," presented past and current television development and programs. Its publication translated intensified efforts to promote the medium to a broad audience, also visible at the radio fair. The status of television as a consumer good, however, brought forward several problems, most urgently the issue of high costs. Television sets were expensive, and receiver sales were accordingly slow. The set prices were a frequent topic in the press, which reported about price reductions and complained about the sets' inaccessibility. As one article underlined, for the listener to become a viewer was first and foremost a financial issue.

For the BBC, leading its audience toward televisual consumption required renewed efforts on several fronts, including the extension of programing hours, the education of spectators, and more affordable access to its programs. While the public corporation had no direct influence on the consumer electronics market and did not determine the price of television sets, it carried the whole responsibility for the attractiveness of televisual content. At the 1938 exhibition the institution chose to follow Baird's and others' example and to stage the production of such content.

OPENING STUDIO DOORS

While the glass studios celebrated transparency literally and symbolically by creating visual access to infrastructure and production processes, it excluded the audience physically from the production space. Toward the end of the 1930s, a new

televisual attraction was introduced at fairs that suspended this exclusion. The new format invited the audience to perform live before the camera and thus allowed a transgression of the former division between production and reception spaces. In this exhibition design fairgoers experienced television's materiality as *participants*.

At the 1939 New York World's Fair, for instance, Westinghouse and General Electric installed small television studios in their pavilions, giving "fair guests not only an opportunity to see television in action but to take part in its programs." In both settings the picture was transmitted to an adjacent viewing room, where several small television receivers were situated. The exceptional character of participating in a television transmission was emphasized by the distribution of attendance cards "certifying" that the particular person "has been televised" at one of the pavilions. The cards, one of many souvenirs the visitors would take home, brought a bit of television into the living room—and invariably linked the medium to a particular brand.

The Westinghouse TV exhibit was featured in an in-house film production, *The Middleton Family at the World's Fair.*³⁶ Shot on the premises of the corporation's pavilion, the movie glorified the contributions of free enterprise to progress and affluence by recording an "average" American family's visit to the fair.³⁷ Early in the film the *pater familias* and his son inspect the television studio. Reduced to only the essential elements, it comprises a stage, a microphone, and a television camera. Adjacent to the production space, and separated from it by a glass window, a receiving room with several television sets is located. On entering the space, the boy is invited to stand in front of the camera onstage. While he starts conversing with the attendant, his father walks to the viewing room to observe him on the screen. After a brief moment the boy asks through the camera, "How am I doing, father?" Without the possibility of replying verbally, the latter forms an "ok" sign with his fingers to the son through the glass window. For the son—and the movie audience alike—this gesture verifies the liveness of the transmission and thus confirms the "veracity" of the televisual experience.

In Great Britain the BBC similarly introduced a sophisticated feature at the 1938 exhibition discussed above. Called "Come and Be Televised," the one-hour program invited "celebrities and members of the general public" to be "televised in the studio at Radiolympia," passing from behind the glass windows into the studio space. According to a BBC memo, among the participants "of interest" were an American journalist who had survived an encounter with "American gangsters," an English businessman building his own house, a lady "whose hobby is crocodile hunting," and a "Scotchman who lives at Inverness, and who is on intimate terms with the Lochness [sic] Monster." Beyond featuring such exceptional characters, the program's overall design strengthened the institution's strategy of bringing television to its (potential) viewers by familiarizing the audience with television and its operation and filling airtime with free content.

Not all interviews took place trouble-free, however, as a letter from a participant in the 1939 program to the BBC testifies. For this participant the experience—although enjoyable—was somewhat disappointing, since he was interrupted by the "hostess" before he could repeat "a verse which [he] had adapted to bring in television." His letter furthermore alluded to a debacle of another sort: "With reference to the old gentleman who in 'Come and be televised' on Thursday morning complained about the cutting out of Picture Page during August. He appears to think that other people should not have a holiday so that his pleasure be not interrupted." In other words, the "old gentleman" quoted in the letter had used his airtime to criticize the BBC for interrupting programs during summer months and taken advantage of the contingent character of liveness to communicate his dissatisfaction on-air. For both the participants and the institution the studio at Radiolympia thus formed a space to experience the unpredictability and potential surprise of live programming: inviting the audience into its production space, the BBC exposed itself to unexpected behavior and criticisms.

By opening the studio doors, "Come and Be Televised" expanded the glass studio's goal of revealing the medium's inner workings. Contrary to the latter, however, it created the possibility for an individual engagement of the audience with the medium and its institution. If earlier displays spectacularized television's machines and production processes through their framing behind a window, the new mise-en-scène undid the separation of spaces before and behind the glass. As a participatory exhibit it staged a physical encounter between the medium's (future) audience and its broadcasting institution, which implied a bodily experience of television, be it in the form of a hand gesture in the Westinghouse film or of storytelling and letter writing in the BBC's program.

FROM EPHEMERAL TO PERMANENT STRUCTURES

The ephemeral studio built for Radiolympia 1938 thus represented a new way to communicate the "behind the scenes" of television, to allow the audience to engage with the new medium, and to tie the latter's identity to the BBC. These increased public relation efforts accompanied the ongoing institutionalization of the new medium and constituted in particular an answer to the construction of permanent but (for the public) restricted studios. As one article in *Radio Times* explained, the Radiolympia studio's ultimate role was indeed to replace a visit to the BBC studios located in Alexandra Palace: "Please may I visit the television studio at Alexandra Palace?' is a plea that is made many times every week by members of the public. Working conditions are normally such that a 'Sorry, quite impossible' is the only answer that can be given. The position is very different with the giant television studio in the National Hall at Olympia." Thanks to its ephemerality, the studio offered an opportunity not available during "normal" service. To work in glass

studios and with the audience would not be sustainable on the long haul for BBC's television crew; for the duration of a radio fair, however, it promoted the new medium, and its institution, by literally bringing in its potential audience. In other words, the ephemeral studio accompanied and consolidated the institutionalization of television taking place beyond the exhibition grounds.

For the general public the BBC's growing interest in television became visible in June of 1935, when the corporation announced it would install television studios in Alexandra Palace, a former entertainment venue in north London.⁴² The transformation of Alexandra Palace into up-to-date television studios represented a break from the institution's previously reluctant attitude toward the new medium and reflected the national and international pressure exerted on the BBC to go forward with it. During the mid-1930s the Selsdon Committee had discussed the ideal placement for a new television building and assessed its most important features, among others its distance to Broadcasting House (BBC's headquarters in central London) and its elevation. The crumbling ruins of Alexandra Palace were eventually chosen from a list of four possible sites, which had also included the iconic Crystal Palace.⁴³

The original plans for Alexandra Palace had been designed in the late 1850s by Owen Jones, who had been responsible for the Crystal Palace's decoration in 1851. The new exhibition building should again be made of glass, with a huge dome covering a winter garden, a concert hall, a theater, and vast exhibition areas. But after early financial difficulties, the original plans were modified and a less spectacular version of the palace was eventually opened in May of 1873. 44 Shortly after the inauguration, the building burned down, but it was rebuilt rapidly and used again as an entertainment and exhibition venue. In the interwar period the building and its premises went mostly unused. Through the BBC's occupation of the site in the spring of 1936, Alexandra Palace was revived as a center of modern leisure and information culture and as a symbol of England's leading position in television. 45 The BBC's occupation of the premises, however, redefined the building's function: as a popular site for mass events, it had drawn the city into its halls. As a broadcasting studio, it henceforth "radiated" signals from the hill outward to the city. 46

This permanent structure simultaneously produced and epitomized television by creating a widely visible monument to the medium. The construction of a physical space for television anchored it within a concrete location and conferred on television a new authority that inscribed it into the official national media landscape. As with other architectural sites for (televisual) broadcasting, Alexandra Palace materialized the dialectics of media spaces, highlighting the space-binding *and* site-specific nature of communication. Whereas exhibitions drew part of their attraction from their ephemerality, and thus exclusiveness and uniqueness, the erection of lasting studios, offices, control rooms, and other infrastructure symbolized producers' willingness to provide television with more stable forms and practices developed by



FIGURE 3.4. A televisual icon: Alexandra Palace, the new BBC television studio with its distinctive antenna. *Popular Wireless & Television Times* 30 (Sept. 12, 1936): cover.

engineers, producers, and performers. Very much like radio shows but as perennial sites, studios like Alexandra Palace participated in the shaping of television and, in particular, in its integration within the mass media industry.⁴⁸

The announcement by the Selsdon Committee about the new site for BBC's television studios was widely echoed. The press enthusiastically embraced the new building and reproduced numerous photographs that transformed Alexandra Palace from the physical location of BBC's TV studios into a symbol of English television. Alexandra Palace was everywhere: on the magazine cover announcing the special issue for Radiolympia, in BBC's annual report, in the pages of radio journals, and on the cover of the 1936 television issue of Radio Times. Traveling around the country, its photograph provided the new "British" television service with a visible identity that went beyond the physical limitations of the service's transmission range. Drawings and photographs of the studio made sure to depict its impressive antenna (fig. 3.4). Representing the only distinctive feature of the new home for this new medium, the antenna signified technological modernity and progress, in stark contrast to the original structure's older forms of entertainment. Subsuming the double function of Alexandra Palace as a geographical location and a broadcasting center, the antenna synecdochally represented the whole building and stood as a metaphor for BBC's entire television service.

From its beginning Alexandra Palace thus circulated as an icon, existing simultaneously as a geographical location and an architectural shelter for television *and*

as a mass reproduced image and symbol of the electronic medium.⁴⁹ Beatriz Colomina's incisive summary of modern architecture and its links to modern mass media—"The house is in the media and the media is in the house"—perfectly suits the BBC's television studios.⁵⁰ From the first transmission realized on its premises, Alexandra Palace became inseparable from its representations. As a concrete space photographed and circulated in the press, it participated in a network of signifiers that symbolically shaped the image of British television; as a space producing televisual representations, it created the images transmitted by British television.

TELEVISION AT RADIO CITY

In the United States NBC's glamorous television launch took place at the 1939 New York World's Fair, where the corporation presented a widely seen pavilion in the shape of a radio tube.⁵¹ NBC's involvement with television had, however, been promoted one year earlier thanks to a sophisticated public studio at Radio City. Opened in 1938, the studio invited its visitors to a "television tour" similar to the radio studio tours it also offered. Already in 1933, the site at Rockefeller Center had been chosen as the future television location, and at the opening of the building complex, a "group of four studios on the ninth floor" had been reserved for television broadcasting.⁵² The entrance hall to NBC's headquarters represented the company's activities in monumental photomurals by Margaret Bourke-White. Blown up to giant size, the photographs depicted fragments and singular elements of transmission and reception technologies, communicating the grandeur of the corporation. Included in this dispersed view of modern media-making was an enormous image of a cathode ray tube located just next to a huge radio antenna tower. In his discussion of Bourke-White's mural, Olivier Lugon argues that the artist commented on the power of the new means of communication by creating an analogy between wireless communication and the photographic mural. Like broadcasting—and, in particular, like television, the future cornerstone of NBC's empire—the photomural functioned as an amplification of visual information.⁵³

From late summer 1938 on, visitors paying fifty-five cents could tour an actual television studio exclusively established for demonstration purposes. The press release issued on June 13, 1938, before the opening of the television tour, presented the future attraction "as a complete unit in itself":

Three studios have been set aside for the benefit of the public. The first houses the Iconoscope camera, a "boom" microphone and other equipment for broadcasting sight as well as sound.... Once the camera has been inspected, the group will be taken to an adjoining studio separated from the telecasting room by a huge glass panel, a telephone connected to the studio, and the four RCA experimental television sets which will show the action taking place in the studio. A fifth receiving set, yet to be delivered, will be in an unfinished chassis, with all the works exposed. This

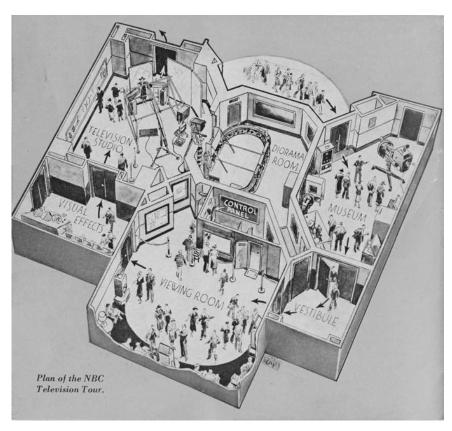


FIGURE 3.5. Map of the NBC television exhibition studio at Radio City. National Broadcasting Company, *America's First Television Tour: Demonstrating [and] Describing the Art and Science of Seeing at a Distance* (New York: National Broadcasting, 1939).

will be open for inspection by tour parties. In the second studio visitors will be able to see performers in the room they have just left, both on the screens of the receiving sets and, through the glass panel, in real life. Guides will converse with persons in the telecast studio so that their image, doubly visible in receiving set and through the panel, will be accompanied by their voices audible both through the loudspeaker and over the telephone. The third room will be the first television museum.⁵⁴

The NBC television tour's objectives were obvious. By combining the display of progress (in the museum) with the unveiling of an outstanding technology (in the other rooms), NBC hoped to educate and inform its future audience about its new service. The tour revealed every aspect of television production and consumption as envisioned by the corporation, shaping television after its own image and pre-

senting the medium as belonging to NBC. The press release notably emphasized the "huge glass panel" and the sets placed in close proximity, celebrating the visibility created by the transparency of glass and screens.

For the 1939 New York World's Fair, NBC promoted this visibility through a small booklet, America's First Television Tour: Demonstrating-Describing the Art and Science of Seeing at a Distance, which included a map of the different segments of the "show studio" tour (fig. 3.5). The map suggests that, except for the "large glass panels," no other windows existed: the world on view was the world produced within these walls. Following a predetermined path indicated by arrows, the visitor passed these transparent surfaces not as a flaneur in urban space but rather as part of a well-oiled machine that, in each room, revealed a new window onto its own workings. In the so-called viewing room the sights conflated with the television images, which showed in reduced size what was visible through the two windows opening onto the television studio. The demonstration studio no longer merely displayed television: its entire architecture was transformed into a technique of seeing, in which windows opened views similarly to those seen on screens. Whereas the combination of transparent surfaces and multiple screens created the impression of a surplus of visibility, the demonstration studio merely promoted itself. The visitors paying the entrance fee to "see at a distance" were brought into a space turned not toward the outside but to the inside of the corporation. From the booklet distributed to every camera on display, the television tour advertised television itself, not just its content, as NBC's product.

CONCLUSION: INTERWAR TELEVISION AND CONSUMER CULTURE

The exhibition of television studios during the interwar period thus aimed first and foremost at performing the medium and its makers. Be it the early displays of inventors and small entrepreneurs or the sophisticated mise-en-scène of public institutions and commercial corporations, the displays highlighted television's materiality and infrastructure. Organized around showings of televisual machinery rather than content, the medium's introduction to its first audiences was thus highly reflexive and pointed relentlessly to television itself. Following David Thorburn and Henry Jenkins, this "self-awareness" and "self-reflexivity" may be understood as inherent to the "periods of media change" and the particular "aesthetics of transition" they engender. As a "new media," interwar television participated in a changing mediascape, and its reflexivity was linked to the moment of its emergence: the hypermediated exhibition displays explained its functioning to visitors and curious crowds, and, in doing so, coconstructed television as a means of instantaneous communication.

But television's reflexivity can also be understood as a result of the exhibition gesture. On display, each exhibit highlighted this very gesture of displaying, which

in turn put the spotlight on the object shown. As Janet Ward writes, the act of displaying is "an act of unfolding, spreading out, in the sense of constantly calling attention to itself." It is intrinsically exhibitionist and thus essential to the "culture of showing" characteristic of modern consumer society. Interwar television's reflexivity indicates the medium's place within this culture, a place determined less by the commercial value of receivers and programs than by pleasurable—and commercialized—encounters with technological modernity. The entangled history of exhibitions and interwar television points to the ways in which the medium, despite lacking programs and audiences, participated in modern experiences of industrial and consumer culture. Built to exhibit television in the making, the ephemeral studio was at the heart of this experience.

NOTES

- 1. Boddy, Fifties Television, 1.
- 2. Delavaud, L'art de la télévision.
- 3. Standard histories of early television focus on the medium's technical development, but recent scholarship offers more diverse historiographical perspectives. See, e.g., Uricchio, "Television, Film and the Struggle for Media Identity"; Jacobs, *Intimate Screen*; Sewell, *Television in the Age of Radio*. Very recently, Doron Galili has adopted a media archaeological perspective to discuss the intermedial entanglements of television with other media, in particular cinema; see Galili, *Seeing by Electricity*.
- 4. This chapter is part of my book *Interwar Television on Display*, in which I analyze the entangled history of television and interwar exhibitions from a transnational perspective.
- 5. Exhibitions continued to play an important role in the medium's promotion and legitimization during the postwar period; see Wheatley, *Spectacular Television*, esp. chap. 1.
 - 6. Arnheim, "Seeing Afar Off," 77.
- 7. For a discussion of these televisual imaginaries see Uricchio, "Television, Film and the Struggle for Media Identity"; and Galili, *Seeing by Electricity*.
- 8. See Udelson, *The Great Television Race*, 77–78; for an exhaustive technical and transnational history of interwar television see Burns, *Television*.
- 9. Albert W. Protzman, "Television Studio Technic," *Journal of the Society of Motion Picture Engineers* 33, no. 7 (July 1939): 26–40, 26.
 - 10. "300,000 Visit N.Y. Show, See 1930 Design," Radio World, Sept. 28, 1929, 20.
 - 11. On Sanabria see Udelson, The Great Television Race, 66-77.
 - 12. "Television to Link Theaters in Test," New York Times, Oct. 14, 1931, 31.
 - 13. Bolter and Grusin, Remediation, 174.
- 14. This display accompanied the launching of the first experimental television service in London, a cooperation between Baird Television and the BBC. For a discussion of the different starts of television services by the BBC see Medhurst, "What a Hullabaloo!"
- 15. Trenton, "Now! Where Do We Go from Here?" *Television: The World's First Television Journal* 2 (Nov. 1929): 451.
 - 16. Trenton, 453.
 - 17. Trenton, 451.
 - 18. See Thompson, "Machines, Music, and the Quest for Fidelity," 131.
 - 19. See Thompson; see also Sterne, *The Audible Past*, 261–65.
 - 20. Thompson, "Machines, Music, and the Quest for Fidelity," 148–56.

- 21. Sterne, The Audible Past, 261.
- 22. Trenton, "Now! Where Do We Go from Here?" 451 (emphasis in the original).
- 23. See Burns, British Television, 351-59.
- 24. Noel Ashbridge, Controller (Engineering), "Report on Demonstrations of Television at the RMA Exhibition at Olympia," Sept. 7, 1936, BBC Written Archives Centre, Caversham Park, Reading (hereafter BBC archives), T 23 / 77 / 2.
 - 25. "Television Demonstrations," Radiolympia (1937), 148.
 - 26. "Wait for Radiolympia!" Radio Times, July 22, 1938, 16.
- 27. "News of the Week: Radiolympia. Television the Focal Point of the Show," *Wireless World* 43, no. 991 (August 25, 1938): 187.
- 28. For detailed discussions of televisual displays at the postwar *Ideal Home Exhibitions* see Wheatley, "Television in the Ideal Home"; and Chambers, "Designing Early Television for the Ideal Home." For a broader account of the history of the Ideal Home Exhibitions see Ryan, *The Ideal Home through the 20th Century.*
 - 29. "Alexandra Palace Goes to Radiolympia," Radio Times, August 19, 1938, 7.
 - 30. Jacobs, Intimate Screen, 43 (emphasis in original).
 - 31. "Impressions from Olympia," Wireless World and Radio Review, no. 993 (Sept. 8, 1938): 228.
- 32. "Progress of Television," *The Times* (London), August 23, 1938, 8. See also TV Publicity Pamphlet 1938. BBC Archives, T 23 / 80.
- 33. Until December of 1936, 427 receivers were sold; in June of 1937 the British industry had sold a total of 1,444 television sets. Burns, *British Television*, 446.
 - 34. See "Radio Notes," Popular Wireless and Television Times 31 (August 28, 1937): 579.
- 35. "Television—Facsimile—Radiotype," New York World's Fair 1939–1940 records, Manuscripts and Archives Division, New York Public Library, P1.44, box 401, folder 12.
 - 36. Westinghouse Electric & Manufacturing Co, The Middleton Family.
- 37. Warren Susman observes that the idea of an "average" person was central to the vision and the rhetoric of world's fairs organizers. The Westinghouse film certainly sustained this discourse. See Susman, "The People's Fair."
 - 38. Television program in Radio Times, August 19, 1938, 15.
- 39. "Come and Be Televised," BBC memo, Sept. 1st, 1938, provided by the Alexandra Palace Television Society. I thank Simon Vaughan for his kind assistance.
 - 40. G. Makemson (?) to the BBC, August 30, 1939, BBC Archives, T 14 / 929 / 1.
 - 41. "Alexandra Palace Goes to Radiolympia," Radio Times, August 19, 1938, 7.
 - 42. "London Television Station Chosen," The Times (London), June 7, 1935, 13.
- 43. One reason for not choosing Crystal Palace was that it was already occupied by John Logie Baird's company, which had signed a lease in 1933. Like Alexandra Palace, the Crystal Palace offered sufficient space and was located on an elevated site: the two media—exhibitions and television—asked for similar localizations within the urban landscape. Installing its headquarters, including four television studios, in this most famous of all exhibition buildings, Baird's firm stayed until a fire in 1936 destroyed laboratories, studio, offices, etc. See Burns, *John Logie Baird, Television Pioneer*, 297–98, 325–26.
- 44. Grand Opening Festival, Saturday, May 24th, 1873. Programme and Book of Words (London: Burt & Co., 1873).
 - 45. Burns, British Television, 409.
 - 46. "Television To-Day," Radiolympia (1938), 37.
 - 47. See Ericson, Riegert, and Aker, "Introduction," 1–18.
- 48. For more about American television studios' role in the promotion of the networks' corporate image and of the medium as a "modern" means of communication, see chapter 10 of this volume; and Spigel, *TV by Design*.

- 49. With regard to the importance of photographs taken of studio exteriors for the social shaping of a new medium, see Brian R. Jacobson's fine-grained analysis of Hollywood's early studios and their architecture of "fantastic functionality." Jacobson, "Fantastic Functionality," 60–65.
- 50. Colomina, "The Media House," 57. This is equally true for the Broadcasting House, BBC's head-quarters in Central London, opened in 1932 and designed by a team of modernists including Wells Coates and Serge Chermayeff.
- 51. On television at the New York World's Fair see Becker, "Hear-and-See Radio' in the World of Tomorrow"; and Fickers, "Presenting the 'Window on the World' to the World."
- 52. "Opening of Radio City, New York," *Nature*, Dec. 30, 1933, 998. In the early 1950s NBC would hire industrial designer Norman Bel Geddes to design entirely new production facilities, which, however, would not be built. See Gleich, "Lost Studio of Atlantis."
 - 53. Lugon, "Entre l'affiche et le monument," 89-95.
- 54. "Television Exhibit Planned for Visitors to Radio City," press release, June 13, 1938, George H. Clark Radioana Collection, Archives Center, National Museum of American History, Smithsonian Institution.
 - 55. Thorburn and Jenkins, "Introduction," 4.
 - 56. Ward, Weimar Surfaces, 196.
 - 57. König, Konsumkultur, 33.