



Geographies of Liveness: Time, Space, and Satellite Networks as Infrastructures of Live Television in the *Our World* Broadcast

CHRISTINE EVANS

University of Wisconsin–Milwaukee, USA

LARS LUNDGREN

Södertörn University, Sweden

This article historicizes the emergence of television satellite infrastructure by exploring a key moment: a 1967 transnational satellite broadcast called *Our World*, that was to reach viewers across the northern hemisphere, including the USSR. Drawing on archival sources that reveal extensive negotiations among the producing sides, we find that *Our World's* claimed creation of “global presence” was indeed, as Lisa Parks has argued, a fantasy of modernization tied to temporal and spatial hierarchies of modernization, but one neither exclusive to the West nor uncontested by the show’s socialist participants. We argue that the program’s temporal claim to conquer space via liveness required the constant assertion of spatial hierarchies and conflicting temporalities, based on unequal and unpredictable material infrastructures, personal relationships, and rival symbolic claims. We describe these temporalized and spatialized conflicts as “geographies of liveness.”

Keywords: time, space, liveness, satellites, television, Our World

Christine Evans: evansce@uwm.edu

Lars Lundgren: lars.lundgren@sh.se

Date submitted: 2015–11–20

¹ We thank the organizers and participants of the 2015 ICA Communication History Division preconference as well as the anonymous reviewers for their valuable suggestions and feedback. This article originally contained direct quotations and images from the BBC Written Archives Centre. However, in response to concerns about Open Access publishing and Creative Commons licenses, and due to publishing deadlines, the BBC WAC refused us permission to publish direct quotations and images in an open access publication. In order to comply with their denial of permission, therefore, we have, where possible, found alternative published sources for quotations from BBC documents and, where that was not possible, paraphrased direct quotations while retaining citations to the original documents. We have also removed an image of a map we had hoped to include in this article. That map image is, however, available in another, non-open-access, forthcoming article, and we have included a citation here so that interested readers may view the image that way.

Copyright © 2016 (Christine Evans & Lars Lundgren). Licensed under the Creative Commons Attribution Non-commercial No Derivatives (by-nc-nd). Available at <http://ijoc.org>.

"A Great Global Adventure"

In a *Radio Times* article on the 1967 satellite program *Our World*, Aubrey Singer, the program's chief editor, described *Our World* as "a great global adventure" and a "historic television event" (Singer, June 24–30, 1967, p. 11). In the article, Singer accentuated the program's specific temporality, inviting audiences to take part in an event unfolding live in front of their eyes. Singer's ambition echoed a well-established account of television as essentially live and immediate that guided television production practices in this period (Bourdon, 2000). What made *Our World* unique as a live television event, however, was its global ambition, aiming to make the live televised image travel 200,000 kilometers, encircling the entire northern hemisphere.²

Our World aired on June 25, 1967. It was the product of years of cooperation, negotiation, and planning, led by the BBC, but involving national broadcasters in 18 different countries as well as regional broadcast organizations such as the European Broadcasting Union (EBU) and International Organization of Radio and Television (OIRT). It was thus a unique example of cooperation between broadcasters on both sides of the Iron Curtain, with the BBC and Soviet Central Television as central actors. In the end, the cooperation failed when Central Television, together with five other broadcasters in Eastern Europe, decided to withdraw from the program as a consequence of the outbreak of the Six-Day War. The program thus fell short as a truly global event, though it still reached an estimated 400 million people around the world.

Our World has garnered considerable academic interest, as an iconic and groundbreaking broadcast (Bignell & Fickers, 2008; Miller, 2013). Lisa Parks has written by far the most detailed analysis of *Our World*, describing it as a "satellite spectacular" reflecting Western claims of "global presence" (Parks, 2005, p. 23). Parks uses the term *global presence* to historicize the meanings of liveness and immediacy. Her key argument is that the global presence represented in *Our World* should be seen as a Western fantasy, rooted in discourses of (Western) modernization. In addition to historicizing liveness, we suggest, in line with Philip Auslander (2008), that liveness cannot be "examined as a global, undifferentiated phenomenon" (p. 3). Moreover, as Jane Feuer (1983, p. 18) has argued, liveness presents itself as one means of overcoming a fragmentation of space. In this article, we embrace Parks' call to historicize liveness and global presence. In doing so, we suggest that the temporality of *Our World* points toward a global, but geographically and politically differentiated, idea of liveness that must be understood in relation to the spatial relations that it claims to overcome. To underline the importance of infrastructures to the show's ability to offer "global presence," as well as the very active role of the socialist bloc in both building these infrastructures and contesting Western claims about them, we propose to understand the show's production in terms of multiple, contested "geographies of liveness" that complicated *Our World's* claims to "global presence."

² In 1942, Lee De Forest wrote about television's today and tomorrow and predicted television "to bring into the home . . . the sights and sounds of the entire world. When it projects the instantaneous present rather than the past it will be more realistic than the motion picture" (De Forest, 1942, pp. 349–350).

We take this concept to include three forms of spatial, temporal, and infrastructural rivalry. First, despite the implicit claim of live productions that liveness is accessed and experienced equally across both time and space, in fact, even within the group of countries that contributed to and participated in the production of *Our World*, access to material infrastructures necessary for live broadcasts and their symbolic power were unequally distributed across space and geopolitical boundaries. This ongoing contestation of inequality within live infrastructures is a second important feature of “geographies of liveness.”³ In the case of *Our World*, and likely other live transnational broadcasts, these inequalities were *not* successfully effaced and made invisible by producers in charge—instead, they were the subject of ongoing conflict and negotiation among the participating sides. Third, the infrastructures created for the broadcast were ultimately invisible to the show’s audiences, and, especially in the case of Soviet participation, largely kept secret (Siddiqi, 2011). As a result, the broadcast event could be promoted and celebrated in entirely contradictory ways in different national contexts, as broadcasters and other participants presented conflicting accounts of their own place within the modern infrastructure the broadcast created and celebrated. This surprising openness to multiple claims and interpretations is a third feature of the “geographies of liveness” underlying live transnational broadcast events. Throughout, we highlight the ways in which questions of access to modern technology, of temporal and spatial hierarchy within global media infrastructures were built into the project both physically and symbolically from the beginning.

Our investigation draws on archival records of the correspondence and negotiations between the producing sides, including the Eastern European participants, held in the BBC’s Written Archives Centre, as well as records regarding the construction of Soviet satellite television infrastructure in the Soviet Ministry of Communications archives, now housed in the Russian State Economic Archive. We also draw on Soviet and Western journalistic coverage of *Our World* and a subsequent Soviet broadcast closely modeled on it. We find that the planning and production of *Our World* was indeed based on a fantasy of modernization, but one that was neither exclusively “Western” nor uncontested by the show’s planned participants on both sides of the Iron Curtain. What was subject to contention was *both* the temporality of satellite-mediated modernity, predicated on instantaneous access to satellite images from around the world, *and* its spatiality. The British organizers of *Our World* by necessity engaged many participants—the powerful U.S. and Soviet space programs, who alone could launch communications satellites, as well as many smaller countries whose national infrastructures of cables and rebroadcast towers were nonetheless essential to the program’s success. Infrastructural negotiations quickly became questions of power and symbolic representation that took spatial as well as temporal form: Who could claim to be the center of the spectacular, modern, transnational infrastructure created to produce the instantaneity of *Our World*? Who would be relegated to its periphery, visually, within the broadcast, and, more materially, in the actual infrastructure constructed for *Our World*? Pulling off this live, instantaneous transcendence of space required the creation, over months, of an elaborate set of plans, scripts, and technical networks—requiring, ultimately, the creation of a command central that would take the lead in the negotiation of the broadcast’s final form, represent itself as administering the broadcast during the show itself, and serve as the final authority in coordinating technical decisions. Where would this controlling center of the live

³ Geographical and spatial perspectives in communication research has been addressed by, for instance, Falkheimer and Jansson (2006) and Couldry and McCarthy (2004).

network be located? Whose national infrastructures and personnel made *Our World's* live temporality possible? These questions of center and periphery were at the heart of the broadcast's production of liveness. They were also, we find, highly dependent on the actual construction of satellite infrastructure in the participating countries as well as the hotly contested symbolic representation of that infrastructure in the planning process.

Liveness, Modernity, and Satellite Geographies

The possibility of instant transmission of images was identified as a key characteristic of television already in its infancy. The concept of liveness has remained central in recent discussions of the ontology of television, with, for instance, John Corner who argues that it is the "possibility of 'instant' transmission in television," its "liveness" that makes it different from, for example, photography or cinema (Corner, 1999, p. 25). Liveness is often linked to television reflexively; the idea of "seeing at a distance" is ingrained in the name of the medium and becomes almost self-explanatory (Auslander, 2008; Bourdon, 2000). Feuer, however, effectively challenged the purported centrality of liveness to television in a 1983 essay, arguing that liveness is a "generalized ideological stance toward the medium itself," an ideological positioning of the television audiences into "its 'imaginary' of presence and immediacy" (Feuer, 1983, p. 14). In her analysis of *Good Morning, America*, Feuer (1983, p. 18) likewise demonstrates how liveness is employed as a means of "overcoming an extreme fragmentation of space" to bring the country together. It is not difficult to see how Singer, in creating a live global event, sought to overcome the extreme fragmentation of an even larger, global space. But *Our World's* global ambition also raised the question of the universality of liveness as suggested by Auslander, who emphasizes the importance of the cultural and social contexts that shape local understandings of liveness. In the case of *Our World*, we argue that these cultural and social contexts profoundly shaped the material networks that made the broadcast possible. Focusing on the construction and negotiation of satellite infrastructures, we emphasize the inseparability of the temporal and spatial claims that underlie the rhetoric of "liveness" in media history.⁴ We share Brian Larkin's understanding of infrastructure as the "totality of both technical and cultural systems that create institutionalized structures whereby goods of all sorts circulate, connecting and binding people into collectives" (Larkin, 2008, p. 6). Larkin explores infrastructures in a colonial context and thus addresses the ever-present power structures involved. In the present case, the idea of connecting people into collectives is likewise a contested one (Bowker & Star, 2000; Star, 1999).

In her essay on *Our World*, Parks picks up Feuer's critique of liveness, arguing that it is used not only to overcome fragmentation of space on a national scale, but that the ambition of the show was to establish what she calls "global presence," an imaginary construct that relied on liveness and presence, which, at the time was "indistinguishable from Western discourses of modernization" and that "nations

⁴ The idea that time and space are inseparably linked in any artistic or other representational project is well established in, for example, literary criticism (cf. Bakhtin, 2002, pp. 15–16) and philosophy (cf. Lefebvre, 1974). Geographers have similarly called for the reintegration of time into the humanistic and social scientific study of space (Harvey, 1989; Massey, 1999). In media research the problem of time and space has long been central, often inspired by the work of Harold A. Innis (1951), James Carey (1989), and others.

could only claim themselves as 'modern' if they were in range of American, Western European, or Japanese satellite television signals, earth stations, or networks" (Parks, 2005, pp. 23–24). The production of *Our World*, however, complicated these claims by bringing in non-Western actors. The liveness of the show was therefore a "negotiation of preexisting temporal structures," negotiations which, Parks argues, ended up with "Western epistemologies firmly in place, patrolling the lines between the democratic West and Communist East" (Parks, 2005, p. 45). Referring to Saskia Sassen, she concludes that *Our World* can be understood in terms of a geography of centrality and marginality, with a highly structured geography privileging global cities like London, New York, and Tokyo. Turning to the archival records documenting the negotiations leading up to the program, and the eventual withdrawal of the Eastern European broadcasters, we draw attention to how the temporal structures and hierarchized geographies that Parks underlines in her study of *Our World* came into being, emphasizing the ways in which they were highly contested by Eastern European participants throughout the production process and even after the broadcast.

In a recent article, Sabina Mihelj and Simon Huxtable (2015) have complicated the relationship between temporal structures and hierarchized geographies further, drawing from examples of television in the Soviet Union and Yugoslavia. They emphasize the clock and calendar time so inherent in the idea of television's liveness (cf. Scannell, 2014) and how they may come in conflict with the teleological time of state socialism, both in its more extreme, millenarian version (which they call "revolutionary time") and a more modest, everyday sense of progress toward socialist goals (which they call "socialist time").⁵ Addressing revolutionary time as a teleological vision, "beginning with revolution and ending in a communist future" (p. 3), Mihelj and Huxtable (2015) problematize the temporality of television in relation to a distinctive communist modernity, thereby complicating our understanding of the ways in which television, temporality, and modernity are interrelated in national television cultures.⁶ The global ambition of *Our World* problematized this relationship even further because the production of a transnational live broadcast required negotiating conflicting temporalities and notions of liveness.

Toward *Our World*

When *Our World* finally reached its (not entirely) worldwide audience, it was the result of a long-lasting transnational cooperation. In fact, the BBC and Soviet Central Television had been discussing program exchanges and coproduction for well over a decade. This ongoing relationship between the BBC and Soviet Central Television began in 1955 when a delegation from the Soviet Union made a visit to the BBC (Lundgren, 2015b; Webb, 2014). The following spring, the BBC made a return visit and went to Moscow, Leningrad, and Kiev to learn about Soviet broadcasting. On this occasion, the delegation

⁵ Already, Walter Benjamin characterized revolutionary time as a break with cosmological temporality, as an interruption of everyday life (Buck-Morss, 2002). In their study of television in Yugoslavia and the Soviet Union, Mihelj and Huxtable (2015) explore how this rupture can be understood in relation to television audiences.

⁶ The notion of Communist modernity and alternative modernities are explored in more detail in Mihelj's (2011) book *Media Nations*. The authors draw upon Eisenstadt's (2000) *multiple modernities*, a much-discussed concept in Soviet and Russian history (cf. David-Fox, 2015; Fitzpatrick, 2000).

witnessed the first live broadcast of the May Day Parade, and during the following years they continued to develop a working relationship. This collaboration reached a peak in April 1961, when cosmonaut Yuri Gagarin's return to Moscow was broadcast live to Western Europe (Lundgren, 2012). Before the satellite age, program exchanges and live broadcasts had relied exclusively on the existing network of cables and microwave stations, creating a network that crossed the European continent. Following the success of Telstar in 1962, new opportunities opened up as the promise of spanning the oceans of the world was fulfilled.⁷ The first broadcasts using Telstar were an exclusively Western affair, with television images traveling between the U.S., France, and the UK (Schwoch, 2009). In the following year, however, contacts were made to pave way for a transnational broadcast called *The Race to the Moon*, which would include a discussion between speakers from the Soviet Union, Great Britain and the USA (Adam to Sakisoc, August 22, 1963). The broadcast was never realized, perhaps because of its openly political character, but indicates an early willingness to create a satellite network that would link the two superpowers of the Cold War.⁸

The planning of *Our World* started in 1965 with the ambition to encircle the northern hemisphere by midsummer's day (June 21) 1966. In a letter dated December 9, 1965, Aubrey Singer, Head of Television Outside Broadcasts at the BBC and Chief Editor of *Our World*, made a casual proposal to Soviet foreign correspondent Henry Trofimenko (Singer to Trofimenko, December 9, 1965), asking him whether the Soviet Union would be interested to participate in such a broadcast.⁹ The earliest drafts of the show proposed inserts from various places in Europe, the Soviet Union, Japan, and America. One provisional title for the broadcast was *The Longest Day—The Longest Way*, suggesting the effortful, even gratuitous transversal of space by this transnational broadcast. Before settling on a name relying on an idealized spatiality, *Our World*, yet another temporally infused name was proposed: *Around the World in 80 Minutes*, obviously referring to the novel by Jules Verne. The temporal perspective communicated by these early program names was, however, not one of immediacy, liveness, and presence but rather of calendar and clock time. Rather than the instant transmission of images, these proposed titles emphasized the longest day of the calendar (notably, in the northern hemisphere only, excluding the southern hemisphere entirely) or the clock time of the program itself. In the end, however, the broadcast's organizers reverted to *Our World*, a title stripped of temporal signifiers.

⁷ While the Gagarin broadcast was restricted to the land mass of Europe, the BBC announced that the next step would be to "span the oceans of the world" ("Announcement to press agencies," April 14, 1961, quoted in Lundgren, 2015a, p. 185).

⁸ Ingrid Volkmer has rightly emphasized the early development of satellite networks as "civic communications spheres" (2008, p. 232) linked to each of the superpowers and their respective European blocs. We would like to stress that the desire to link these divided national satellite networks were present from the beginning. This was especially true during the years between the first transatlantic satellite broadcast via launch of the joint French-British-U.S. satellite, Telstar, in 1962 (Schwoch, 2009, 2013) and the Soviet announcement of the creation of the Intersputnik system in 1969 (Downing, 1985).

⁹ 1966 proved too soon for both practical reasons (the fact that satellite infrastructure was not yet complete) and political ones; the Soviet side had a number of concerns about the content of the broadcast (Singer, 1966, March 17).

From the early stages of planning the details of timing and network construction raised the possibility of conflict. One example was the proposed date: Central Television's leadership was quite critical of the chosen date, since the June 21 was not only midsummer's day, but also very close to the anniversary of Hitler's invasion of the Soviet Union on June 22, 1941 (Singer, 1966, March 17). In a March 7, 1966 note to Anatolii Bogomolov, following a meeting with him, Singer suggested that perhaps the Soviet side could reconsider its objections to June 21 as a date for the transnational broadcast, arguing that the program would be in the interest of peace and that it would be better to disregard sad anniversaries for a good cause (Singer to Bogomolov, March 7, 1966). Singer's desire to retain June 21 as a date was, of course, driven by practical concerns: It was incredibly difficult to coordinate a program time and date with so many national services and international organizations. Yet the choice was also ideological. In 1966, the planned broadcast was organized around cosmic themes, and the BBC had selected June 21 precisely for its solar significance, as the longest day of the year—a fact indifferent to violent and unequal human histories.

This episode exposed the difficulties of navigating both sides' different understandings of time and temporality. To the BBC, the cosmological time of the solstice, and universal (albeit northern) appeal, rendered the Soviet objections insignificant while to Soviet Central Television teleological, historical time—in which Soviet martyrdom and heroism in WWII was a crucial plot point—proved far more important. In this instance, the Soviet side eventually prevailed, and, following a postponement of the entire broadcast to the summer of 1967, the date was changed to June 25.

As negotiations continued throughout 1966 and early 1967, the show's implicit and explicit geographies came into focus. One consistent feature of the BBC organizers' proposals was the search for a way of conveying the magnitude of the technical feat the broadcast entailed. Live broadcasts must make liveness visible by placing reporters outside, often in city streets, so that weather, time of day, the clothing of passersby and other details reinforce both liveness and the transversal of distance. Early drafts of the broadcast referred to this effortful display explicitly, emphasizing the different times of day during which segments in different parts of the globe took place and thus stressing the importance of clock time to the perception of liveness.

Yet the focus on time of day did not seem, to the BBC's producers, entirely sufficient for marking the broadcast's spectacular transcendence of distance. The selection of locations from which Soviet Central Television would provide live inserts for the program revealed the importance, to *Our World's* BBC producers, of imperial histories in conveying a sense of spatial and temporal distance and, thus, technical achievement. In initial proposals to the Soviet side, the BBC suggested that the Soviet inserts come from places specifically associated with Russia's imperial expansion in the 18th and 19th centuries: Crimea and Central Asia. The choice of these ethnically non-Russian locations, so central to visual and literary representations of the Russian "Orient," hardly seems accidental (Brower & Lazzerini, 1997; Ram, 2006;). For a program focused almost exclusively on the developmentally uniform global north, Singer and his colleagues struggled with how convey physical distance without reference to the cultural and social distance of empire. Nonetheless, the difficulties of constructing satellite infrastructure across the Soviet Union's vast territory ultimately made these desired broadcast sites impossible by June 1967, and Soviet

participation was scaled back to segments from Moscow, Sverdlovsk (on the symbolic border between Europe and Asia), and Vladivostok in the Soviet Far East.

If the BBC sought to emphasize the exotic cultural distance from the West of some parts of Soviet territory to heighten the audience's experience of instantaneity, they also worked to prevent the representation, on the Eastern European segments of the broadcast, of socialist forms of temporality. An April 18, 1967 memo from Polish television representative Maria Wisniewska to Singer asked why the proposed subject matter for their segment had been rejected. To Wisniewska, it was difficult to understand why Polish television could not show workers watching educational television. Surely, she argued, the need to continually improve professional skills by means of the latest science and technology was self-evident? (Wisniewska to Singer, April 18, 1967, p. 1). The proposed Polish segment emphasized the ways that television technology was already contributing to the gradual construction of Communism, or at least the ongoing, everyday betterment of society. Both possibilities fit squarely within what Mihelj and Huxtable (2015, p. 3) identify as two distinctively socialist television temporalities: revolutionary time and socialist time. The Poles, in turn, rejected a BBC counterproposal which would have shown Polish viewers watching television in shop windows (Wisniewska to Singer, April 18, 1967, p. 1), an image suggesting that, rather than actively using communications technology to advance social goals and popular technical literacy, Polish citizens were largely still excluded from access to modern communications networks. At stake in these two, conflicting proposals for the content of the Polish segment of *Our World* were claims both about the temporal nature of the socialist bloc's membership in the modern, satellite-mediated world—were the Poles “behind” the West in the availability of modern communications technology in the home?—and the extent of the Polish state's agency in using television technology to represent a distinctive socialist temporality in which, day by day, socialism was being built. The Polish proposal's public, educational, collective use of television also stood in implicit contrast with the supposedly entertaining and pacifying function of television under capitalism. In this sense, the segment suggested that perhaps the Poles were in fact ahead of their Western capitalist counterparts in their ability to harness modern communications to achieve social goals.

The coordination of the program behind the scenes was likewise an arena for competition and opposing claims about the division, representation, and control of space. Despite the prevailing rhetoric about the creation of a single infrastructure, the coordination of the broadcast required dividing the globe into spheres of influence behind the scenes. After a July 21, 1966 meeting, Andrew Wiseman and Singer reported explaining to Georgii Ivanov that the broadcast network would be divided into three zones, defined, it seems, largely in terms of both existing technical and governing infrastructures (OIRT and the EBU) and geopolitical influence (Singer & Wiseman, July 21, 1966). The BBC told Soviet Central Television that it would have preeminence within its own “zone” (the OIRT zone, made up of Soviet satellite states) in the planning process, thus reaffirming the objective imperial position of the Soviet Union over Eastern Europe.¹⁰

¹⁰ In fact, there were two OIRT zones, with the Soviet Union making up OIRT Zone 2 (Special Notice T.3/67, n.d., p. 2).

In its own internal documents, however, BBC staff represented Moscow and its Eastern European network quite differently. A couple of months before airing *Our World* the European Broadcast Union produced a special notice with details of the technical planning. The notice documents the procedure for communication between the contributing organizations, but also includes maps of the television networks in the different broadcast areas that would be linked through the broadcast.¹¹ The map outlined the visual circuits in Eastern Europe, the OIRT zone, includes schematics of how Vladivostok would be linked to Moscow by means of the Molniia satellite system.

Most strikingly, however, the BBC network map made Moscow into just one minor hub in the *Our World* network, whose arrows pointed west to London, the coordinating center of the broadcasting effort. A draft article written by the BBC project leadership for the British magazine *Radio Times* likewise emphasized the way in which this purportedly apolitical infrastructural project was centered on and controlled by the BBC in London and had originated there (Carleton Greene, 1967, p. 1).

The planning process made clear that, from the BBC's perspective, *Our World* made London an imperial capital once again, now as the center of media infrastructures that were purportedly optimistic, rather than exploitative (Starosielski, 2015). This was even further accentuated in the broadcast itself when host Cliff Michelmore announced: "And here in London, England, is the centre of the web, the control room of the whole programme. From here it goes out to something like 170 million television sets in 24 countries" (Clark, 2015 [TV broadcast]).

The broadcast was announced, in a British *Radio Times* article, in epochal terms: *Our World* gives hope, the draft article announced that television would bring states from all around the earth together, much like the American railway system linked the United States into one nation (Carleton Greene, 1967, p. 2).¹² The broadcast was thus presented as an explicitly imperial infrastructural project; like the golden spike that finally connected the U.S. rail system, the broadcast would join vast territories under a single technical regime, launching a new era of mutual communication and visibility (Singer, n.d., p. 1). Yet the BBC authors of this *Radio Times* article were also at pains to downplay their own central and controlling role in the creation of this live, immediate, and imperial network: Immediately after comparing the broadcast to the closing of the U.S. frontier, the authors reassured their readers that *Our World* was a cooperative project, constructed on terms of equality, cooperation, and peaceful, nonpolitical objectives (Carleton Greene, 1967, p. 2).

In fact, however, as the BBC's American railway metaphor hinted, this ostensibly politically neutral, cooperative network was also, potentially, an opportunity for empire building, at least symbolically—a chance for participating powers to represent themselves as central to a vast new media infrastructure (Couldry & McCarthy, 2004, pp. 4–5). Despite the BBC's triumphal rhetoric about its central place in the broadcast's infrastructure, the success of the Soviet side in negotiating a new broadcast date, June 25, not the June 21 summer solstice—a change that in turn meant abandoning references to

¹¹ Due to copyright restrictions, the network map cannot be reproduced here. Instead, see Lundgren and Evans, 2017.

¹² See also Feuer (1983).

calendrical time in the broadcast's very name—suggests the significant impact of the BBC's Eastern European negotiating partners in shaping the final broadcast. Although it would be easy to see the eventual Soviet withdrawal as a kind of victory for the BBC side, which could now place itself at the center of the broadcast unchallenged, in fact the Soviet bloc withdrawal from *Our World* tells a more complicated story, in which the socialist bloc continued to assert its own temporal and spatial priorities in the representation of satellite infrastructure.

Withdrawal

The Soviet decision to withdraw is traditionally portrayed as the result of external, Cold War military-political events. Around lunchtime on June 21, 1967, the chief editor of *Our World*, Singer, received a telex from Deputy Chairman Georgii Ivanov of the USSR Radio & Television Committee. The telex was rather brief and explained that the broadcast was supposed to strengthen the mutual understanding and friendship between nations; however, the Six-Day War, which the Soviet telex described as "a plot of certain imperialist forces, primarily the USA, against the Arab peoples," conflicted with this goal. Furthermore, since a number of the countries engaged in *Our World* took part in this "slandorous campaign against the Arab countries and the peaceful policy of the Soviet Union and other Socialist states," Soviet Television refused to participate in the broadcast (Broadcasting, June 26, 1967, p. 77; cf. Wiseman, 1967). The telex framed the withdrawal as a political matter, having little to do with the broadcast's rhetorical commitments to liveness or its production of space (Lefebvre, 1974), beyond the apparent conflict between the theme *Our World* and the latest developments in world politics.

Although the cancelation was politically useful for Soviet-Middle Eastern relations, the Soviet withdrawal was convenient for other, technical and ideological, reasons as well. First, the network of ground stations for the Molniia satellite system was far from complete by June 1967. The Soviet Orbita system was prepared for readiness in time for the 50th anniversary of the October Revolution on November 7, 1967, which took place over four months after the planned *Our World* broadcast (Downing, 1985, p. 468). The construction of satellite infrastructure on the Soviet side was much more closely tied to the celebration of this major anniversary in the Soviet calendar than it was to the needs of the *Our World* broadcast. Reports in the Soviet Ministry of Communication's archives indicate, moreover, that only two of the planned Orbita ground stations were brought into operation between September 1967 and November 1967, with 19 more coming into operation only in December 1967 and January 1968 ("Glavnoe upravleniie kosmicheskoi svyazi," 1967-1970).

The delay in the building of the Soviet satellite network suggests the entangled nature of the technical and the political in infrastructural projects. The Soviet side's focus on readiness for a political anniversary in the construction of ground stations was only the most obvious example; politics shaped technical processes (and vice versa) in other ways as well. As had been the case with the construction of local television stations, Soviet satellite ground stations were built using various funding sources, with some paid for entirely by local state enterprises, others by the Regional Party Executive Committee [Oblispolkom], and others receiving central funds ("Spravka" 1968). These diverse, highly specific local arrangements produced significant delays in some areas, which the Ministry of Communications was

obliged to address. Once again, the production of liveness was predicated on the completion of long-term infrastructural projects, without which live conquest of space was impossible.

Even if the Soviet side had been able to contribute to the broadcast, sending its signal to Western and Asian audiences, its more far-flung citizens—the very ones ostensibly to benefit from the arrival of Moscow's signal by satellite—would not have been able to watch. As Parks suggests, the satellite spectacular was predicated on an equation between modernity and access to the live, immediate temporality provided by satellite technology. Even had the Soviet side participated via prerecorded segments, as was the case for Mexico (Parks, 2005, pp. 38–39), this would have made for a humiliating contrast. At the same time, domestic viewers were perhaps not the only intended audience from the Soviet organizers' perspective. Soviet Central Television was to provide the most spectacular visual of the entire program, a live satellite image of Earth transmitted from one of the Kosmos satellites that had been launched in April 1967. Initially, the image was supposed to be transmitted from one of Intelsat's satellites, but that satellite ceased to function. The expectations facing Soviet television were thus not only about being able to link their vast territory together but also to be able to produce television images from outer space ("Amendment 1," 1967, p. 8). For this to happen, the technical infrastructure had to be in place to carry the television signal down to Earth, and cross the entire northern hemisphere. Had the broadcast come off, *Our World* would have showcased the Soviet space program, able to provide whole-Earth images from space where U.S.-led Intelsat could not.

In light of the extensive conflicts we have outlined thus far, the Soviet withdrawal seems overdetermined—far from the "intrusion" of conflict in the Middle East into purportedly apolitical broadcast cooperation, *Our World's* transnational infrastructural project was shot through with conflict and incommensurability between the sides, often expressed temporally and spatially. However, the shared attraction of televisual liveness and global presence on both sides must still be taken seriously. Rather than carrying the *Our World* project forward, however, these shared ambitions never precluded (indeed, helped facilitate) the construction of multiple transnational networks centered on different metropolises.

Aftermath

After the Soviet and Eastern bloc withdrawal from *Our World*, Soviet Central Television quickly moved to recreate the *Our World* broadcast plan as an exclusively national project. Yuri Fokin, a prominent Soviet television journalist closely involved in the *Our World* negotiations, helped revive the *Our World* idea as an all-Union live satellite spectacular celebrating the 50th anniversary of the October revolution. This live satellite broadcast, organized and led by Fokin, was called not *Our World* but *One Hour in the Life of the Motherland* [Odin chas iz zhizni rodiny]. Most important, it linked satellite-mediated liveness to the temporality and spatiality of Soviet socialism. *One Hour* made Moscow, not London, the center of a modern satellite broadcasting network and connected the broadcast's liveness to a calendrical holiday that was also a founding moment in the teleological "revolutionary time" of Eastern European state socialism—the celebration of the October 1917 revolution.

These changes placed *One Hour* into a longer tradition of spectacular projects in Soviet media history that had linked liveness with the revelation of progress toward Communism. As in the West, early

Soviet television workers and critics imagined the new medium as inherently live, spontaneous, uncensored, and capable of creating in viewers a transcendent, festive experience of live presence [effekt prisutsviia], conquering distance (Evans, 2016, pp. 21–46; Roth-Ey, 2011, pp. 236–245). At the same time, it was always quite possible for Soviet live broadcasting idealism to refer to transcending the considerable distances within the Soviet state itself. Indeed, many decades before television, Soviet filmmakers and journalists explored fantasies about media, modernization, liveness, and the conquest of distance. These fantasies were sometimes all-Union and sometimes global in reach. They all centered, however, on Moscow.

One important Soviet precedent for *Our World/One Hour* was an extraordinary 1961 book project entitled *One Day in the World*, produced by the highly connected editor of the newspaper *Izvestiia*, Aleksei Adzhubei, and featuring the events of a single day, September 27, 1960, all around the world (Wolfe, 2005). The book's concept was quite similar to the later plans for *Our World*, but there were key differences. The book's cover featured an image of a "red sputnik circling a map-like drawing of the globe, with a small image of one of the Kremlin's clocks in the lower right corner" – conveying both the book's aspirations to global presence (like *Our World*) and the place of Moscow at the center of modern communications networks (unlike *Our World*) (Wolfe, 2005, p. 48).¹³ The book's claims to immediacy and presence were expressed via its "snapshot" perspective, intended to emphasize the global every day. *Our World*, by contrast, struggled with the place of the everyday and the ordinary in its narrative, relying heavily on more spectacular, extraordinary content, such as elite athletic performances and famous artistic performers.¹⁴ Like *Our World*, and, indeed *One Hour*, the 1961 *One Day* book also employed childbirth as a motif, opening with a global chronology that began with the birth, at midnight, of a baby boy to Tatiana Pakhomova, a nurse in Moscow. In both *One Day* and *One Hour*, the childbirth motif was presented optimistically, with each child offering a glimpse of a communist future. *Our World*, by contrast, was more ambiguous, linking the image of a future generation to an ominous shrinking of resources and space itself. Most fundamentally, *One Day's* organizing task was documenting the progress of global socialism. The book was, in fact, a second edition of sorts – an updated version of a 1935 book of the same name, created by Maxim Gorky and featuring the worldwide events of September 27, 1935. Since the first book's publication, the 1961 book's preface announced, "the world of socialism, given birth by October, already unites a third of the population of the planet, smashes the chains of colonial slavery, and takes aim at a capitalism consumed by contradictions and doomed to perish" (Wolfe, 2005, p. 50). The task of revealing the global spread of socialism made *One Day in the World* far different, both temporally and spatially, than *Our World*, and placed it in a teleological, revolutionary temporality focused on longer term historical transformations (Mihelj & Huxtable, 2015).

Central Television's reimagining of the *Our World* broadcast as an exclusively socialist project and continuation of previous Soviet journalistic traditions, required the complete renarration of the broadcast's

¹³ The idea of Moscow as a cosmopolitan center was not new at the time, as Katerina Clark (2011) has shown there is a long history of imagining Moscow as a cultural center not only of the Soviet Union but also for Western Europe, an idea particularly strong during the first half of the 1930s.

¹⁴ A draft promotional article for *Our World* was edited to emphasize the show's dramatic content and deemphasize an initial focus on the ordinary and everyday. (Carleton Greene, 1967, May 26, p. 1).

origins, obscuring the long history of cooperation and negotiation with the West on which the broadcast was in fact based. In a long review of the broadcast published in the professional broadcasters' journal *Sovietskoe radio i televidenie*, Fokin rewrote the history of the program, describing it as his original idea, inspired by Soviet journalism students: "It was the middle of August," Fokin's narrative began,

Students studying to be television commentators and correspondents were finishing their summer internships at Central Television. Vacation lay ahead and everyone's spirits were high. . . . Eighteen young, energetic people who have recently started on the difficult path of television journalism—that's a lot of power. . . . Various ideas and doubts passed through my head, and yet. . . . Guys, what if we try to make a show, built around mini-reports? A show built around live segments from different ends of the country? (Fokin, 1968, p. 10)

In just a few hours, Fokin claimed, "we had written a first draft of a scenario for the future broadcast called 'One hour in the life of the Motherland' (Fokin, 1968, p. 10)." To Fokin, then, it is not only the satellite broadcast itself that is a showcase of immediacy, liveness and presence: in his account, years of planning in an international context are reduced and condensed into an almost instantaneous production process.

In fact, however, *One Hour* offered a careful reworking of the *Our World* format to suit Soviet temporal and spatial preferences: the broadcast began and ended in Moscow, and included segments focused on commemorating WWII, such as the eternal flame in Volgograd, which Fokin and Ivanov had proposed for the Soviet Union's *Our World* inserts earlier. The broadcast highlighted Soviet medical achievements and featured school children in symbolically "underdeveloped," ethnically non-Russian Soviet Tajikistan. Where the BBC had proposed showing Russian schoolchildren in Leningrad—implying that advanced science and technology were the reserve of the West and that the socialist world was still learning—*One Hour* reversed these messages, putting European Russia at the center and its own, internal periphery in the position of tutelage. Most strikingly, the show emphasized the salience of these imperial borders with a segment from a border guard post on the USSR's Western frontier (Damskii, 1968).

The Soviet broadcast did not go unnoticed by the Western broadcasters. In a letter dated November 7, 1967, Noble Wilson at the BBC told Peter Pockley at the Australian Broadcasting Commission of the broadcast of *One Hour in the Life of the Motherland* on the November 1, noting the significant similarities between the broadcasts, particularly segments from a maternity ward and other ideas developed during the planning of *Our World* (but not, in fact, original to that broadcast). Hinting at the real technical rivalry underlying the show's concept, Wilson made sarcastic comments regarding the sound and picture quality of the show, comparing them to primitive, 19th century photography. Wilson concluded his report on an upbeat, but profoundly condescending, note that the Soviet Union was technically capable

of pulling such a broadcast off, and that hopefully one day they would join the common choir of world broadcasters (Wilson to Pockley, November 7, 1967).¹⁵

Wilson was referring to concerns throughout the planning of *Our World* about whether Soviet Television would be able to provide the necessary satellite links to bind the vast country together, and ultimately link it to the Western sphere of broadcasters. These remarks continued to position London as the center of an apolitical technical modernity that the Soviet state was ostensibly still struggling to join; the Soviet Union's ability to run a satellite broadcast on time suggested, in his mind, a step toward a harmonious future, figured, in his metaphor, as singing. Again, Wilson presents the Soviets as backward, recalcitrant, not yet full participants in this modern choir. Remarkably—and much like Fokin's invented origin story for *One Hour*—Wilson's comments effaced the long history of Soviet–British live broadcasting cooperation, including the cooperation of European networks in the live broadcast of Moscow's May Day parade and Yuri Gagarin's return from space. Unlike *Our World*, those broadcasts had made Moscow the center of modern live communications infrastructures, which was perhaps why they were so easy to forget, from Wilson's perspective, just as Fokin found it easy to describe the Moscow-centric *One Hour* without reference to the BBC, or *Our World*.

Conclusion

Wilson's comments were far from uncontested. The Soviet *One Hour* broadcast, whatever Wilson thought of it, offered its own, competing temporal and spatial mapping of global satellite modernity for its national audience—one that unfolded within Soviet national boundaries, but which nonetheless closely resembled *Our World*. The idea of "global presence" that Parks characterizes as a "Western fantasy" and links to Western discourses of modernization, was thus very much ideologically contested terrain during the years in which *Our World* was planned and produced. Soviet cultural and political elites had long presented Moscow, in a variety of contexts, as the center of an alternative modernity (Mihelj, 2011; Clark, 2011), one that was equally technologically advanced, but linked to progressive ideals and a millenarian account of historical time. The ideal of global, live satellite broadcasting proved quite flexible and open to reuse by the Soviet side for imagining an exclusively socialist and third world satellite network—the one that was eventually successfully institutionalized as Intersputnik, the Soviet-led communications satellite network.

When we include the interactions between the BBC and Soviet Central Television in the story of *Our World*, the broadcast looks somewhat less successful than the BBC claimed both internally and in public. Rather than unproblematically affirming the networked superiority of London and other global capitals, the claims underlying the *Our World* broadcast remained open to contestation from Moscow and other socialist world participants, both before and after it was produced. The transnational broadcast's claims to liveness and global presence were both facilitated and undermined by a complex set of personal relationships, rival rhetorical claims, and material infrastructures. The technical, spatial, and symbolic

¹⁵ Soviet critics also noted that the Tashkent segment was of lower quality than the rest of the broadcast, although they emphasized, perhaps euphemistically, its failure to fit the style of the rest of the broadcast (Damskii, 1968, p. 13).

conflicts that shaped the broadcast—the underlying “geographies of liveness” at work, we argue, in any transnational live broadcast event—profoundly shaped the *Our World* broadcast and its Soviet counterpart, *One Hour*. The challenges of creating a global satellite infrastructure problematized *Our World's* ability to serve as a triumphant display of Western technical superiority, based on the claim to universal liveness and “global presence.” Instead, they reveal a more complicated, fragmented picture of *Our World's* broadcast and reception, in which traces of conflict and the active role of unequal participants are made visible.

References

- Auslander, P. (2008). *Liveness: Performance in a mediatized culture*. London, UK: Routledge.
- Bakhtin, M. M. (2002). Forms of time and of the chronotope in the novel: Notes toward a historical poetics. In B. Richardson (Ed.), *Narrative dynamics: Essays on time, plot, closure, and frames* (pp. 15–24) Columbus: Ohio State University Press.
- Bignell, J., & Fickers, A. (2008). *A European television history*. Oxford, UK: Wiley-Blackwell.
- Bourdon, J. (2000). Live television is still alive: On television as an unfulfilled promise. *Media, Culture & Society*, 22(5), 531–556. doi:10.1177/016344300022005001
- Bowker, G. C., & Star, S. L. (2000). *Sorting things out: Classification and its consequences*. Cambridge, MA: The MIT Press.
- Browder, D. R., & Lazzerini, E. J. (Eds.). (1997). *Russia's Orient: Imperial borderlands and peoples, 1700–1917*. Bloomington, IN: Indiana University Press.
- Buck-Morss, S. (2002). Revolutionary time: The vanguard and the avant-garde. *Benjamin Studien/Studies*, 1(1), 209–225.
- Carey, J. W. (1989). *Communication as culture: Essays on media and society*. Boston, MA: Unwin Hyman.
- Clark, K. (2011). *Moscow, the fourth Rome: Stalinism, cosmopolitanism, and the evolution of Soviet culture, 1931–1941*. Cambridge, MA: Harvard University Press.
- Conflict splits world telecast. Communist bloc countries drop out of 'Our World' because of Mideast crisis (1967). *Broadcasting. The Business Weekly of Television and Radio*, June 26, 1967.
- Corner, J. (1999). *Critical ideas in television studies*. Oxford, UK: Oxford University Press.
- Couldry, N., & McCarthy, A. (2004). Introduction. In Couldry, N. & McCarthy, A. (Eds.), *MediaSpace: Place, scale and culture in the media age* (pp. 1–18). London, UK: Routledge.

- Damskii, I. (1968). Minuta v efire. Korotkaia retsenziia [A minute on air]. *Sovietskoe radio i televidenie*, 2, 10–14.
- David-Fox, M. (2015). *Crossing borders: Modernity, ideology, and culture in Russia and the Soviet Union*. Pittsburgh, PA: University of Pittsburgh Press.
- De Forest, L. (1942). *Television: Today and tomorrow*. New York, NY: The Dial Press.
- Downing, J. (1985). The Intersputnik system and Soviet television. *Soviet Studies*, 37(4), 465–483.
doi:10.1080/09668138508411603
- Eisenstadt, S. N. (2000). Multiple modernities. *Daedalus*, 129(1), 1–29.
- Evans, C. E. (2016). *Between truth and time: A history of Soviet central television*. New Haven, CT: Yale University Press.
- Falkheimer, J., & Jansson, A. (Eds.). (2006). *Geographies of communication: The spatial turn in media studies*. Göteborg, Sweden: Nordicom.
- Feur, J. (1983). Ontology as ideology. In E. A. Kaplan (Ed.), *Regarding television: Critical approaches—An anthology* (pp. 12–22). Frederick, MD: University Publications of America.
- Fitzpatrick, S. (Ed.). (2000). *Stalinism: New directions*. London, UK: Routledge.
- Fokin, I. (1968). Kak vse eto nachinalos' [How it all began]. *Sovietskoe radio I televidenie*, 2, 10.
- Harvey, D. (1989). *The condition of postmodernity: An enquiry into the origin of cultural change*. Oxford, UK: Blackwell.
- Innis, H. A. (1951). *The bias of communication*. Toronto, Canada: University of Toronto Press.
- Larkin, B. (2008). *Signal and noise: Media, infrastructure, and urban culture in Nigeria*. Durham, NC: Duke University Press.
- Lefebvre, H. (1974). *The production of space*. Oxford, UK: Blackwell.
- Lundgren, L., & Evans, C. (forthcoming). Producing global media memories: Media events and the power dynamics of transnational television history. *European Journal of Cultural Studies*.
- Lundgren, L. (2012). Live from Moscow: The celebration of Yuri Gagarin and transnational television in Europe. *VIEW: Journal of European Television History and Culture*, 1(2), 45–55.
- Lundgren, L. (2015a). 'Forerunners of a new era': Television history and ruins of the future. *Media History*,

- 21(2), 178–191. doi:10.1080/13688804.2014.991385
- Lundgren, L. (2015b). (Un)familiar spaces of television production: The BBC's visit to the Soviet Union in 1956. *Historical Journal of Film, Radio and Television*, 1–18. doi:10.1080/01439685.2015.1105515
- Massey, D. (1999). Space-time, 'science' and the relationship between physical geography and human geography. *Transactions of the Institute of British Geographers*, 24(3), 261–276. doi:10.1111/j.0020-2754.1999.00261.x
- Mihelj, S. (2011). *Media nations: Communicating belonging and exclusion in the modern world*. Basingstoke, UK: Palgrave MacMillan.
- Mihelj, S., & Huxtable, S. (2015). The challenge of flow: State socialist television between revolutionary time and everyday life. *Media, Culture & Society*, 38(3), 1–17. doi:10.1177/0163443715594869
- Miller, T. (2013). *Television studies: The basics*. New York, NY: Routledge.
- Parks, L. (2005). *Cultures in orbit: Satellites and the televisual*. Durham, NC: Duke University Press.
- Ram, H. (2006). *The imperial sublime: A Russian poetics of empire*. Madison, WI: University of Wisconsin Press.
- Roth-Ey, K. (2011). *Moscow prime time: How the Soviet Union built the media empire that lost the cultural Cold War*. Ithaca, NY: Cornell University Press.
- Scannell, P. (2014). *Television and the meaning of "live."* Cambridge, UK: Polity.
- Schwoch, J. (2009). *Global TV: New media and the Cold War, 1946–69*. Chicago: University of Illinois Press.
- Schwoch, J. (2013). "Removing some of the romantic aura of distance and throwing merciless light on the weaknesses of American life": Transatlantic tensions of Telstar, 1961–1963. In Badenoch, A. Fickers, A. & Heinrich-Franke, C. (Eds.), *Airy curtains in the European ether: Broadcasting and the Cold War* (pp. 271–294). Baden-Baden, Germany: Nomos Verlag.
- Siddiqi, A. (2011). Cosmic contradictions: Popular enthusiasm and secrecy in the Soviet space program. In J. T. Andrews & A. A. Siddiqi (Eds.), *Into the cosmos: Space exploration and Soviet culture* (pp. 47–76). Pittsburgh, PA: University of Pittsburgh Press.
- Singer, A. (1967). Our world: Direct by satellite on BBC-1. *Radio Times*. June 24–30, 1967.
- Star, S. L. (1999). The ethnography of infrastructure. *American Behavioral Scientist*, 43(3), 377–391.

doi:10.1177/00027649921955326

Starosielski, N. (2015). *The undersea network*. Durham, NC: Duke University Press.

Volkmer, I. (2008). Satellite cultures in Europe: Between national spheres and a globalized space. *Global Media and Communication*, 4(3), 231–244. doi:10.1177/1742766508096079

Webb, A. (2014). *London calling: Britain, the BBC World service, and the Cold War*. London, UK: A&C Black.

Wolfe, T. (2005). *Governing Soviet journalism. The press and the socialist person after Stalin*. Bloomington, ID: Indiana University Press.

Archival Sources

Adam, K. (1963, August 22). [Letter to Sakisoc] (E2/719/7). Caversham, UK: BBC Written Archives Centre.

Amendment 1. (1967, June 8). (T14/2723/3). Caversham, UK: BBC Written Archives Centre.

Announcement to press agencies: First "live" TV broadcast from Russia—Return of Major Gagarin. (1961, April 14). (T11/70/2). Caversham, UK: BBC Written Archives Centre.

Carleton Greene, H. (1967, May 26). *Draft article for Radio Times* (E2/864/1). Caversham, UK: BBC Written Archives Centre.

Clarke, R. (2015, December 14). *Our world* [Video file]. Retrieved from <https://www.youtube.com/watch?v=0H9IhSJ6ZjA>

Glavnoe Upravleniie Kosmicheskoi Sviazi 1967–1970 gg [Main Directorate for Space Communications] (1967–70). F. 3527 "Ministerstvo Sviazi SSSR" [Ministry of Communications USSR], op. 55, d. 5–17, 25–32, 37–38, 43–48. Moscow: Russian State Economic Archive (Rossiiskii Gosudarstvennyi Arkhiv Ekonomiki; [RGAE]).

Singer, A. (1965, December 9). [Letter to Trofimenko] (T14/2722/2). Caversham, UK: BBC Written Archives Centre.

Singer, A. (1966, March 7). [Letter to Bogomolov] (T14/2722/2). Caversham, UK: BBC Written Archives Centre.

Singer, A. (1966, March 17). *Russian attitude to 'Round the World in 80 Minutes'* (T14/2722/2). Caversham, UK: BBC Written Archives Centre.

- Singer, A. (n.d.). *Promotional material—Programme story, note by Aubrey Singer* (T14/2723/1). Caversham, UK: BBC Written Archives Centre.
- Singer, A., & Wiseman, A. (1966, July 21). *Record of a meeting with Mr. Ivanov, Vice Chairman of the State Committee of Radio and Television in Moscow. He is also the director of Soviet Television* (T14/2722/2). Caversham, UK: BBC Written Archives Centre.
- Special Notice T.3/67 Our World. (n.d.). (T14/2739/1). Caversham, UK: BBC Written Archives Centre.
- Spravka "o khode proektirovaniie i stroitel'stva ob" ektov kosmicheskoi sviazi po sostoianniu na 15.03.68 g* [Report "On progress in the planning and construction of space communications assets as of March 15, 1968]. (1968, March 15). F. 3527, op. 55, d. 20, l. 5. Moscow: RGAE.
- Wilson, N. (1967, November 7). [Letter to Pockley] (T14/2723/3). Caversham, UK: BBC Written Archives Centre.
- Wiseman, A. (1967, June 21). *Translation of telex from G. Ivanov to A. Singer* (T14/2723/2). Caversham, UK: BBC Written Archives Centre.
- Wisniewska, M. (1967, April 18). [Letter to Singer] (T14/2722/2). Caversham, UK: BBC Written Archives Centre.