

Mikes, Cables, Transmitters

How was the Austrofascist “Turks Deliverance Celebration” of May 14, 1933, broadcast live on *Radio Wien*?

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Abstract

This text is part of the digital mapping project *Campus Medius*, the historical case study of which deals mainly with the Austrofascist “Turks Deliverance Celebration” (*Türkenbefreiungsfeier*) held in Vienna on May 14, 1933. Here, the chapter of the study is republished that examines the equipment used for the live broadcast of the mass rally in the Schönbrunn Palace gardens as well as on *Radio Wien*. It follows a media-archaeological approach that does not primarily focus on the content of the transmitted speeches, but rather asks which infrastructure made these public communication processes possible in the first place.

Keywords: 1933, Austria, broadcasting, Fascism, loudspeaker, mass rally, media archaeology, microphone, public-address system, radio, RAVAG, Vienna

The following text is part of the digital mapping project *Campus Medius* (Ganahl, 2022, 250–263). The historical case study of this project deals mainly with the so-called “Turks Deliverance Celebration” (*Türkenbefreiungsfeier*), which the Austrian Homeland Protection League (*Heimatschutzverband*) held in Vienna on May 14, 1933. It was supposed to be an anniversary event to commemorate the liberation of Vienna from the second Ottoman siege in 1683. In fact, however, it was a kind of kick-off event for what its organizer Ernst Rüdiger Starhemberg, the federal leader of the paramilitary Home Guards (*Heimwehren*), called “Austrofascism.” The mass rally was co-financed by Benito Mussolini, the prime minister of Italy, and carried out together with the Austrian Chancellor Engelbert Dollfuss, who came from the Christian Social Party but publicly allied himself with the Austrofascist Homeland Protection at their “Turks Deliverance Celebration.”

Campus Medius examines this propagandistic event from numerous aspects that are media-historically relevant. Based on dispositive analysis and actor-network theory (Ganahl, 2023), both human and nonhuman, discursive as well as material perspectives are analyzed—for example, the agency of the Baroque gardens of Schönbrunn Palace, where the “Turks Deliverance Celebration” took place, or of the “Bell & Howell 2709” camera, with which the event was filmed for *Fox Movietone News*. Here, the chapter

of the study is republished that deals with the equipment used for the live broadcast of the event on *Radio Wien*. It follows a media-archaeological approach that does not primarily focus on the content of the transmitted



Fig. 1: Engelbert Dollfuss (at the microphones) and Ernst Rüdiger Starhemberg (behind him) on the garden terrace of Schönbrunn Palace in Vienna at the “Turks Deliverance Celebration” on May 14, 1933 (numbers added): (1) carbon microphone (model unknown); (2) dynamic microphone (probably a Western Electric 618A); (3) carbon microphone (Reisz); (4) carbon microphone (Reisz) and above it a dynamic microphone (model unknown); (5) possibly a microphone by the Selenophon Licht- und Tonbild GmbH. Source: Austrian National Library, 106.661 B.

speeches, but rather asks which infrastructure made these public communication processes possible in the first place (Ganahl, 2016).

In the photographs and film recordings of the speeches held during the “Turks Deliverance Celebration” in Schönbrunn Palace gardens on May 14, 1933, a row of microphones can be seen (Fig. 1). Their stands, down which the connector cables coil, are arranged in a semicircle around a wooden podium on the garden terrace

of the palace building. There are six microphones in total, two of which are mounted right above one another, and they are pointed at the speakers roughly at face level. Why half a dozen? While it is only possible to surmise which specific microphone was used for which purpose, their number is explained by the different transmission and recording channels. Besides being transmitted via public-address system in the palace park, the speeches were also recorded by two newsreel teams, broadcast live on *Radio Wien*, and probably also captured on records or in optical sound format by Austrian radio and by the Homeland Protection League.

Clearly identifiable in the surviving pictures of the “Turks Deliverance Celebration” are two carbon microphones by Eugen Reisz from Berlin—the so-called Reisz microphone in a white marble block, which was used from the mid-1920s both for radio and for public addresses. Loudspeakers must have been in operation at the mass rally in the gardens of Schönbrunn Palace on May 14, 1933, because otherwise hardly any of the Home Guard members standing in the parterre or in the avenues would have been able to hear the speeches. In a brochure on preparing for the event, it says: “All commands will be given via loudspeaker” (Karg-Bebenburg, 1933, 9 [my trans.]). In addition, the Palace Captainship (*Schlosshauptmannschaft*) Schönbrunn subsequently invoiced the Austrian Homeland Protection as the event organizer thirteen kilowatt hours at fifty-seven groschen each, in other words a total of 7.41 schillings for the electricity used by the “loudspeaker system” (ÖStA/AdR, SHS 820/1933, Kt. 86 [my trans.]). Furthermore, on the left edge of a panorama of the “Turks Deliverance Celebration,” part of a podium or truck marked “[Laut]sprecher” (“[loud]speaker”) has been captured (Fig. 2).

What exact kind of public-address system was installed in Schönbrunn Palace gardens on May 14, 1933, is documented neither in archives nor by the media of the time. The New York company Western Electric had patented a centralized “Loud Speaking Public Address System” in 1922 (Ehlert, 2005, 324). It is quite conceivable that a speaker tower along these lines was set up at the “Turks Deliverance Celebration.” After all, the company in Vienna that specialized in electroacoustic tasks, namely Czeija, Nissl & Co., was a subsidiary of Western Electric (Schlögl, 2005, 36). Moreover, a dynamic microphone mounted on the speaker’s podium closely resembles the models produced by Western Electric from the early 1930s, e.g., the moving-coil microphone 618A (Fig. 1). The American company’s products were also used via Czeija, Nissl & Co. by Austrian radio, called Radio Verkehrs AG (RAVAG), which equipped its reporters with buttonhole microphones by Western Electric in spring 1933, for example (Ergert, 1974, 56; Radiowelt, 1933a, 795).

Also strongly represented in Vienna were the German electric companies. Siemens & Halske sold a range of dynamic loudspeakers around 1930, including the large “Riesenblatthaller,” which was primarily suited for transmitting public addresses centrally, from a single position (Ehlert, 2005, 328). In the early 1930s, Siemens and the Allgemeine Electricitäts-Gesellschaft (AEG)

transferred their electroacoustic departments to their subsidiary Telefunken, which in this line of business specialized in decentralized public-address systems. In 1932, for example, Telefunken equipped Vienna’s St. Stephen’s Cathedral with dynamic microphones as well as eleven loudspeakers mounted in the nave (Dobesch, 1932). On May 1, 1933, the company was responsible for the public-address system used at the Nazi celebration for the “Day of National Work” on Tempelhofer Feld in Berlin, where echo effects disrupted the acoustic quality. Hence in the following year, Telefunken presented the “mushroom loudspeaker” (*Pilzlautsprecher*), which emitted sound uniformly in a circle and went on to be used at a number of future Nazi rallies with distributed-element circuits (Ehlert, 2005, 330–332; Epping-Jäger, 2003, 106–114, 117–118).

Whereas at the “Turks Deliverance Celebration” on May 14, 1933, central speakers were presumably used to the left and right of the palace terrace, four months later Czeija, Nissl & Co. installed a multipart public-address system with forty-eight electrodynamic loudspeakers in the same venue, Schönbrunn Palace gardens, which were mounted on flagpoles in the Great Parterre, on trees in the avenues, and on the balcony of the palace itself. This electroacoustic installation facilitated a Catholic Mass with some 300,000 participants, which took place in the context of the General German Catholic Congress on September 10, 1933. The voices of the speakers and choir were transmitted from the altar on the palace terrace via dynamic and carbon microphones; the peals came from a phonograph attached to an amplifier, which played the bells of St. Stephen’s Cathedral on records (Rakuschan, 1933).

Due to the connections between Czeija, Nissl & Co. and Western Electric, it is therefore possible that the aforementioned moving-coil microphone captured in some photographs of the “Turks Deliverance Celebration” was part of the public-address system. However, the carbon microphones in front of the speaker’s podium would also have been suitable for this purpose, one of the two Reisz models, for instance, whose noise floor would have been less noticeable in the loudspeakers in the palace park than in the sound film recording, for which dynamic microphones were usually used (Kobl Müller, 1931). In any case, it is a fact that a piece in the *Fox Tönende Wochenschau* newsreel, whose American production company was also linked with Western Electric by patent law (Schumacher & Wulff, 2001, 1201), covered the “Turks Deliverance Celebration” (Jahresschau, 1933; Österreichische Film-Zeitung, 1933, 6). The corresponding recording van stood between the Home Guard members in the parterre: a 35 mm film camera by Bell & Howell was positioned on the vehicle’s roof and the apparatus for recording the optical sound was located inside the vehicle, from which a cable led to the microphone on the palace terrace (Fig. 2).

A couple of steps away from this black sedan, which belonged to either *Fox Movietone News* or a freelance cameraman, stood the truck of Selenophon Licht- und Tonbild GmbH, whose film studio was located nearby, namely at Maxingstrasse 13a on the western edge of

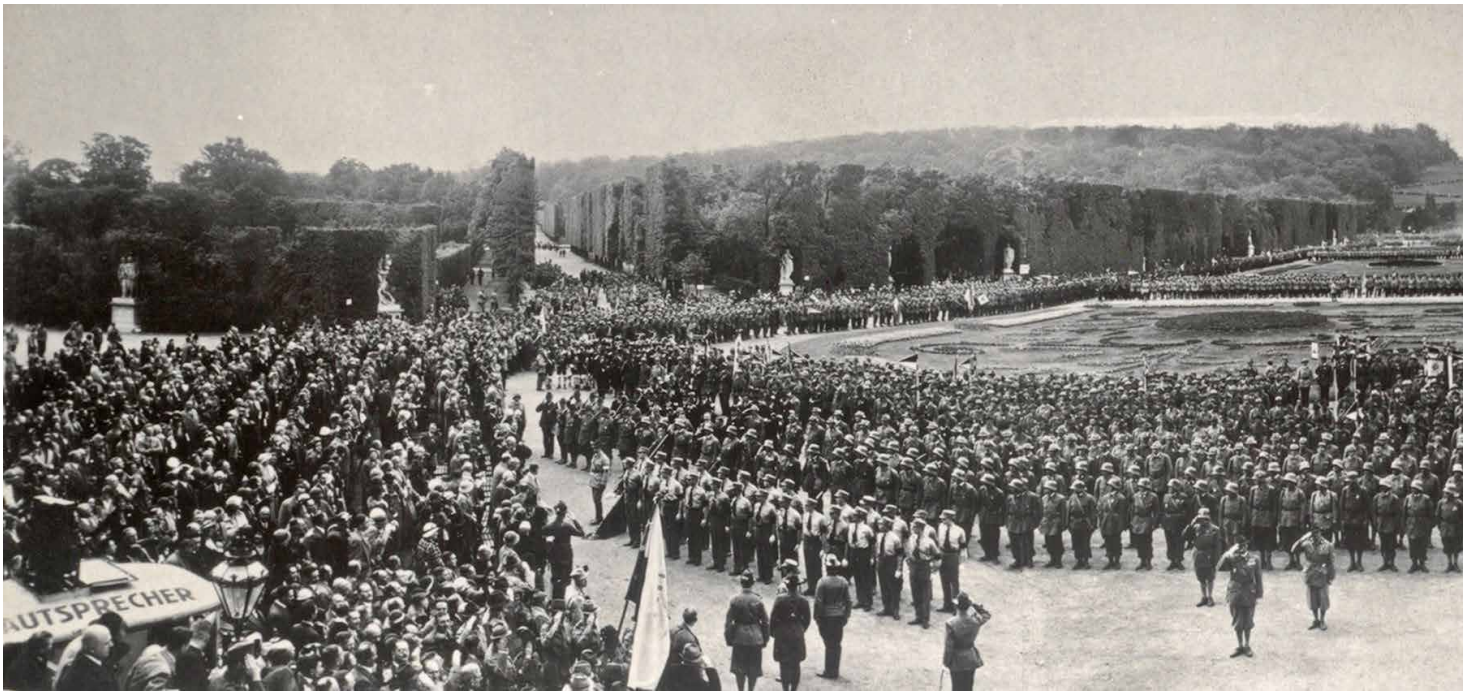


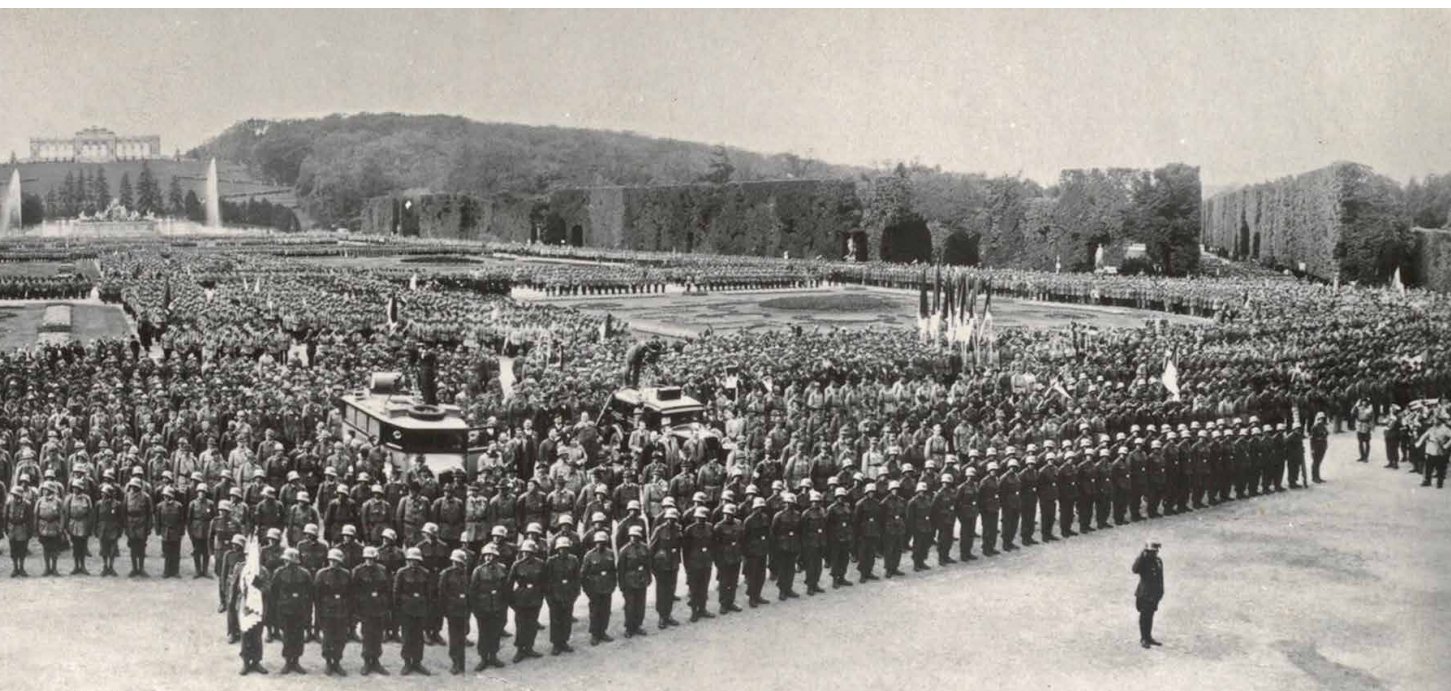
Fig. 2: Panoramic photograph of the “Turks Deliverance Celebration” by the Austrian Homeland Protection in the gardens of Schönbrunn Palace in Vienna on May 14, 1933: on the very left a podium or truck marked “[Laut]sprecher” (“[loud]speaker”) and between the Home Guard men two newsreel recording vans can be seen. Source: Austrian National Library, Pk 2839.

Schönbrunn Palace gardens. The Viennese company had developed its own optical sound method in the 1920s and had been producing newsreels since 1930, initially under the company name, then for Hugo Engel Film GmbH, and from spring 1933 the company was commissioned with the propagandistic *Österreich in Bild und Ton* (“Austria in Image and Sound”) by the Federal Chancellery (Loacker, 2008, 61–65). In contrast to the piece by Fox, these recordings of the “Turks Deliverance Celebration” from May 14, 1933, have not survived but the photographed vehicle is undoubtedly Selenophon’s “traveling sound film studio,” which was equipped with “all the feats of modern sound film technology and electroacoustics” (Mikrophon, 1934, 48). The equipment also included a heptagonal microphone hung in a metal frame, which might be the same as the model that stood between the two Reisz blocks on the palace terrace (Fig. 1).

Selenophon GmbH was founded in 1928 by Oskar Czeija, whose father had established Czeija, Nissl & Co. in the nineteenth century but had sold his shares in the early twentieth century (Schlögl, 2005, 36). His son was never involved in this telephone and telegraph factory, but he played a key role at the Radio Verkehrs AG, which was constituted in 1924 and which he ran from the outset as its general manager (Pensold, 2018, 1–6). The Selenophon optical sound system was developed by Czeija in collaboration with the Viennese physicist Hans Thirring and some RAVAG employees (Gloger, 2002). Therefore, it is unsurprising that the apparatuses produced by the company were used on Austrian radio. In the RAVAG’s recording van, which was set up in the early 1930s and was somewhat erroneously called “transmitter car” (Übertragerauto), it was not only possible to record the original sound on wax and gelatin records; it was also furnished with Selenophon’s professional U7 tape

recorder, which could record and play optical sound on celluloid or paper film (Radio Wien, 1936). After development, the six-millimeter-wide film—in contrast to records—could be cut and stuck back together at will, i.e., edited as in the process of film production. Consequently, this method was suitable not only for archiving sound, but above all for compiling longer audio features.

It is probable that the RAVAG’s recording van was present at the “Turks Deliverance Celebration,” though actual evidence is lacking. In the Österreichische Mediathek, an Austrian archive for sound recordings, a segment of the speech held by Federal Chancellor Engelbert Dollfuss at the rally in Schönbrunn Palace gardens on May 14, 1933, has been preserved (Dollfuss, 1933). Assembled from an announcement, part of his speech, and the national anthem, the document’s origin is uncertain but it is congruent with the optical soundtrack of the aforementioned piece in the *Fox Tönende Wochenschau*, for which reason it can be presumed that the recording comes from this 35 mm film and not from a record or a cine film by the RAVAG. What is certain is that *Radio Wien* reported live from the event from 10:20 to 11:05 a.m. It appears to have been a spontaneous decision, because although the live broadcast was announced in some daily newspapers, it was not mentioned in the listings magazines that were published weekly (Neue Freie Presse, 1933; Radio Wien, 1933, 31). Judging by the schedule of events at the “Turks Deliverance Celebration,” the speeches by Security Minister Emil Fey, by Ernst Rüdiger Starhemberg, the federal leader of the Austrian Homeland Protection, and by Dollfuss were broadcast, and possibly also parts of the field Mass read from 10 a.m. (Karg-Bebenburg, 1933, 3; ÖStA/AdR, BKA-I, 148.459/33). It is also conceivable that a RAVAG reporter conducted interviews with the guests at the celebration or the Home Guard members in the Great



Parterre in addition to moderating the event—at least, a newspaper article following the live broadcast mentions a “reportage by the RAVAG speaker” (Das Kleine Blatt, 1933 [my trans.]).

How did this radio broadcast work from a technical perspective? Although the RAVAG also used ribbon and condenser microphones around 1933, the carbon microphone by Reisz had been in regular use at *Radio Wien* since 1925 (Schwaiger, 1934, 23–24). It can therefore be assumed that one of the two models documented in the photographs of the “Turks Deliverance Celebration” served the live broadcast (Fig. 1). In the marble block of the Reisz microphone, there was a hole filled with carbon granules, over which there lay a rubber membrane. Electricity was transmitted through the granules via electrodes, with the resistance changing due to speech hitting the membrane. The varying electricity caused by the sound waves could then be transmitted to an amplifier by a transformer (Tischner, 1933). The microphone was connected to the tube amplifier by cable, but how did the voices that had been transformed into electricity reach the radio transmitter?

The RAVAG had owned a “shortwave broadcaster car” (*Kurzwellen-Senderauto*) since 1929, which unlike the later recording van, the “transmitter

car,” was equipped for wireless radio transmissions. In this actual broadcasting van, called an OB van, a shortwave transmitter had been installed whose range theoretically covered the whole of Europe (Schwaiger, 1932). In professional radio operations, however, it was only possible to guarantee a radius of ten to fifteen kilometers (Ergert, 1974, 109–111, 116–117). It would have been



Fig. 3: Photographs of events in Vienna from where the station *Radio Wien* reported live on May 14, 1933: the “Turks Deliverance Celebration” in the gardens of Schönbrunn Palace (at the top) and a relay race in the Prater park (at the bottom), printed in *Radio Wien* (Vienna), 9/34 (May 19, 1933), p. 2. Source: Austrian National Library, 607949-C.

quite possible to wirelessly transmit the speeches held on the periphery in Schönbrunn to the RAVAG headquarters in Vienna city center via shortwaves in order to then transmit the broadcasts from there via radio cables. However, the shortwave broadcaster car was used from 11:05 a.m., i.e., immediately after the broadcast of the “Turks Deliverance Celebration,” for a live report on a relay race and photographed doing so on the race track in the Prater park (Neue Freie Presse, 1933; Fig. 3). As Schönbrunn is in the southwest of Vienna but the Prater in the northeast, the OB van cannot have been used in both places as there was simply not enough time for it to travel from one location to the other.

Perhaps one of the transportable shortwave transmitters, which were also in operation at the RAVAG from 1929 (Ergert, 1974, 109–111, 116–117), was used to broadcast the “Turks Deliverance Celebration.” However, it is more probable that the live broadcast was simply transmitted via telephone cable from Schönbrunn Palace to Johannesgasse 4 in Vienna’s first district, where the broadcasting center had been located since 1926. In the two years prior to this, *Radio Wien* had been housed on the top floor of the army ministry on Stubenring. Initially the RAVAG also broadcast from there before erecting a radio transmitter by Telefunken on the Rosenhügel, a hill in the southwest of Vienna, in 1925 whose capacity was increased from seven to fifteen kilowatts in 1927 (Schwaiger, 1929, 52–55, 56–59). Between the studios on Johannesgasse and the large transmitter on the Rosenhügel, an almost ten-kilometer radio cable produced by Siemens was laid that permitted transmissions without distortion at a frequency of up to 10,000 hertz, which covers the most important

range of the human auditory field for speech and music (Kleebinder, 1932, 339).

On May 28, 1933, two weeks after the rally in Schönbrunn, the RAVAG’s new large transmitter with a 130-meter radio mast was officially put into operation on the Bisamberg in the north of Vienna. Again by Telefunken, this system had a transmitting capacity of one hundred kilowatts and had been in trial operation since early May (Radiowelt, 1933b). Due to Austria’s elongated, partly mountainous terrain, even this transmitter was not capable of sending its radio waves to all parts of the country at the strength required for radio reception, and much less its predecessor on the Rosenhügel, which probably transmitted the “Turks Deliverance Celebration.” For that reason, since the mid-1920s radio cables had been laid from the capital city in the far east to the west and south of Austria and several relay stations had been built (Schwaiger, 1929, 55–61). That means that the alternating currents in this specific case, the live broadcast from 10:20 to 11:05 a.m. on May 14, 1933, were not only relayed by radio cable to the Rosenhügel after presumably arriving at the RAVAG headquarters via telephone connection from Schönbrunn Palace, but also to the regional transmitters in Graz, Linz, Klagenfurt, Salzburg, and Innsbruck, which produced electromagnetic waves at the respectively assigned frequency or length and broadcast it in the provinces. To the chagrin of the residents of Vorarlberg, the westernmost part of Austria, who had complained about the poor reception of *Radio Wien* for a decade, the transmitter in the town Lauterach was only completed in late 1934 (Pensold, 2018, 57).

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