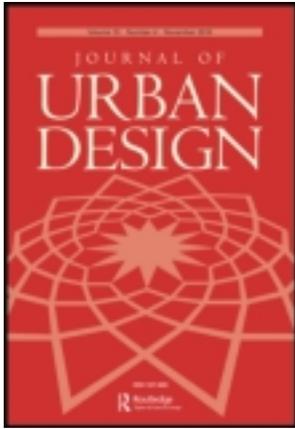


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## The 1922 ‘Symphony of Sirens’ in Baku, Azerbaijan

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**ABSTRACT** *In 1922, a ‘Symphony of Sirens’ was performed by the sounds and movements of human crowds, machine guns, cannons, factory sirens, airplanes, hydroplanes, trains, battleships and a steam-whistle machine across the spaces of Baku, Azerbaijan. Conceived well beyond the conventions of revolutionary festivals, the Symphony manifested 1920s avant-garde aspirations for a radical unity of the arts, technology and urban space. Furthermore, the location of the Symphony was notable: Baku was a city on the edge of the former Russian empire, and Azerbaijan had only two years prior been incorporated as a Soviet Socialist Republic. Connecting with several core tenets of the Soviet socialist and avant-garde movements, the 1922 ‘Symphony of Sirens’ can be interpreted as an avant-garde expansion of Soviet internationalism. The ways in which the Azerbaijani metropolis activated this bricolage of art, space and politics is significant, not least because the spectacle condensed a wide range of practices and ideas from Taylorism, proletarian politics, the artistic avant-garde and Azerbaijani culture. The spectacle’s composition and location also had an outward impact, manifesting a geographical imagination that shaped the region’s cultural and political identity and extended the possibilities of design practice.*

### Introduction

On 7 November 1922, a musical spectacle of unprecedented scale was performed across the spaces of Baku, Azerbaijan. From early morning to mid-afternoon, the so-called Symphony of Sirens mobilized human crowds and machines in a complex call-and-response across Baku’s industrial suburbs, city centre and harbour. Human crowds sang workers’ and revolutionary anthems in chorus as they moved to and from key nodes of entry and ceremony in the city: from the shipping docks to the ferry docks, from the ceremonial square to the Transcaucasus Railroad terminus, and from the military academy, factories and music conservatory. Machines at a variety of scales—including machine guns, cannons, factory sirens, a proprietary steam-whistle machine, airplanes, hydroplanes, trains and battleships—boomed, piped, whizzed and wailed from their dispersed locations and movements in the city’s streets, airspace and harbour. The occasion was the Fifth Anniversary of the October Revolution.<sup>1</sup> By extension, the Symphony of Sirens belongs to a genre of mass spectacles that were performed to recall the collective spirit that arose in the wake of the Revolution. More specifically, the Symphony belongs to a sub-genre of spectacles that

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rehearsed the manifestos of Russian avant-garde artists. As an avant-garde performance, the Symphony employed Futurist and Taylorist principles in a radical unity of the arts, technology, human labour and urban spaces.

The research for this paper began with a simple question: why was this avant-garde spectacle performed in Baku? The question seemed pertinent for two related reasons. First, in architectural and art history, the 1920s vanguard has typically been associated with Russian and European places of production. Despite Azerbaijan's political affiliations with Russia (within both the Russian Empire and Soviet Socialist State), and its historically strong economic ties to Europe, the country is neither Russian nor European. Azerbaijan has remained peripheral to the historiography of vanguard practices, and the location of the Symphony of Sirens in Baku presents a challenge to the geographical boundaries of the avant-garde. Second, it seemed pertinent to recuperate Baku's contemporaneous significance to not only the vanguard artists writing in the 1910s and 1920s, but also to ideologues of the Soviet Socialist Republic. Baku's remarkable modernization and history of geopolitical significance produced the conditions for a highly economically and politically strategic, modern and cosmopolitan city. This had a profound impact, not only on the choice to site the Symphony in this Azerbaijani city, but also on the logistical success of the complex performance and its intended outward symbolism. It is by engaging with this history of Baku that we can see that locating an avant-garde mass spectacle there was strategic to both the avant-garde artistic imagination and the internationalist aspirations of Soviet socialism.

Baku is the capital of Azerbaijan and a port city on the Caspian Sea in the southern Caucasus. The city expanded when it became a major Mongol trading centre along the Silk Road that linked Asia and Europe. Baku became furthermore significant to Tsarist Russia, which identified Baku as a strategic location to forge its geopolitical and commercial dominance in Persian and Indian trade routes and to challenge British and Ottoman rivals. The city's hinterland had historically been considered a mystical place replete with medieval ruins, Zoroastrian temples, and a curious and periodic eruption of natural gas fires. In the late 19th and early 20th centuries, Baku's intriguing landscape was depicted in the films and prose of travellers and artists such as H.G. Wells, the Lumiere Brothers, Khlebnikov, Mayakovsky and Eisenstein. Baku was also a locus of economic possibility and prowess, which was due in part to the discovery of its oil reserves and a subsequent oil boom in the mid-19th century. By the 1900s, Baku produced 70% of Russia's oil, and through the Rothschild and Nobel refineries produced more than half of the world's oil (Henry, 1905). By 1917 Baku was a cosmopolitan, modern city that had sophisticated transportation and communication networks that facilitated its economic and political links to major cities in Europe and Russia. The persistent significance of Baku after the 1917 Revolution lay in the recognition of the modern and industrial capabilities of this city, and its continued strategic location as a gateway to Asia and the Middle East. After 1917, Baku remained geopolitically significant but for different ideological reasons. The city shifted from providing a threshold for imperial expansion to supporting the Socialist expansion of the proletarian revolution to territories beyond Russia's southern borders. On the back of two years of protracted inter-ethnic conflict, Azerbaijan was incorporated as a Soviet Socialist Republic in 1920. The Symphony of Sirens was performed in Baku two years after Azerbaijan's Soviet incorporation.

The task of this paper is to outline the precise relations between Baku and the geographical imaginations of the Russian avant-garde and Soviet internationalism. The sections that follow will reconstruct the sequence and spatial affect of the Symphony of Sirens in Baku, describing how both the city and the Symphony became strategic to the international ambitions of Soviet socialism, and the relations between the Symphony and avant-garde practices in the 1910s and 1920s.

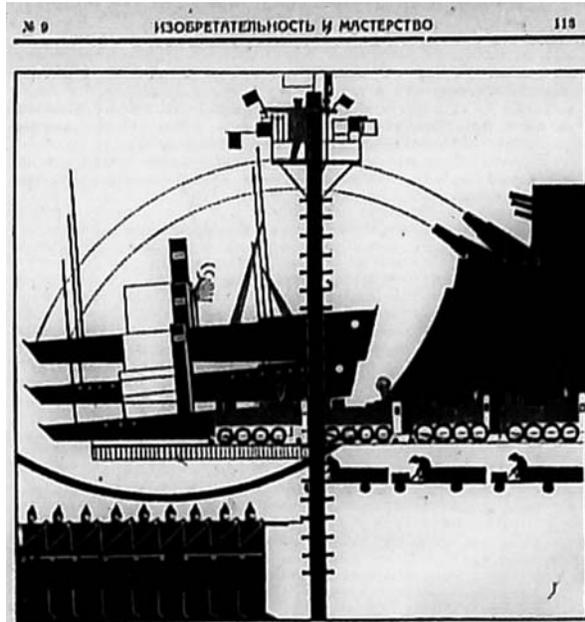
### The 'Symphony of Sirens' in Baku

The day before the event, Arseny Mikhaylovich Avraamov, an avant-garde music theorist and the composer and conductor of the Symphony of Sirens, published instructions for the Symphony in three Baku newspapers: *Communist*, *Baku's Worker* and *Labor*. Avraamov's Baku newspaper instructions and essays in prominent Russian proletarian culture (hereafter: Proletkult) journals provide the primary evidence of the Symphony's occurrence in Baku. In 1923, Avraamov republished the Baku instructions along with an essay entitled, 'Manual for organizing the Symphony of Sirens applicable to various local conditions' for a broader Russian audience in the Proletkult journal *Gorn*.<sup>2</sup> Later in 1924, Avraamov compared the success of the Baku Symphony with the relative failures of his other Russian city Symphonies in the Narkompros Art Department's *Khudozhnik i Zritel* journal (*Artist and Viewer*, 1924, pp. 49–51).<sup>3</sup> More recently, music theorists Miguel Molina Alarcon and Leopoldo Amigo produced a sound reconstruction of the Baku Symphony of Sirens (2008). This essay contributes a spatial reconstruction of the Baku Symphony of Sirens, extrapolated by the author from the Symphony instructions and overlaid on a 1913 Russian map of Baku. This spatial reconstruction indicates the Baku Symphony's key movements and sounds across the city: the arrows and dotted lines map movements in space, and the numbers indicate sequence (see Figure 1).

Avraamov's instructions described the spectacle as a dynamic orchestration of sounds across the city. For this to take place synchronization was of the essence. The first movements were planned for the hour and the half-hour: 7:00, 8:30, 9:00, 10:00 and 10:30 am marked the start of movements by the Caspian flotilla, military and civilian processions and the 'automobile chorus'. Avraamov's instructions also indicated that he conducted the Symphony by using four coloured signalling flags to direct different machine groups. He wrote: "Red and white flag is used for the battery; Blue and yellow for the sirens; A four-colored flag for the machine guns; And a red flag for solo ships, steam engines, and automobile chorus" (Avraamov, 1923; see Figure 2). What is also evident from the newspaper instructions is the Symphony's site specificity: Baku's particular geography, infrastructure and institutions were integral to the particular scale and composition of the performance.

During the Symphony's first movements, Avraamov was located on top of a tower that was constructed in a public square near the harbour. This tower is the single architectural element mentioned in Avraamov's 1923 *Gorn* essay. The three-sided lattice structure was a Swedish mast, which is significant in the context of the Symphony because these towers were originally designed to mount radio antennae. Mast parts were typically mass-produced off-site and assembled with relative technical ease in rural areas to spread the broadcasting area of radio transmissions. This architectural element established an analogous relation between radio transmissions and the aural and temporal effects of the Symphony.





**Figure 2.** Illustration from Avraamov's 1923 essay, 'Simfoniya Gudkov [Symphony of Sirens]' essay in Gorn, 9: 113. The flattened perspective illustrates the key components in the Baku Symphony. Note in particular the vertical element in the image, which indicates the Swedish mast on which Avraamov is positioned with his signaling flags.

However, the Symphony of Sirens was not only 'transmitted' from Avraamov's central location; the Symphony was remarkable because it was not confined to a single venue or district in the city. Instead, the Baku Symphony of Sirens was generated by a complex call-and-response of human and machine sounds and movements across the spaces of Baku.

On top of the Swedish mast, Avraamov could conduct the Symphony components near to him, but the operators of the machines and the leaders of the crowds could not see the conductor's flamboyant flags from a distance. A large portion of the Symphony performance was therefore far more decentralized in its visual effects and spatial organization than Avraamov's central position indicates. This was in part the result of Avraamov's distribution of the Symphony instructions to the Baku public in local newspapers and to the performing groups before the event. Avraamov also delegated organizational control to several Baku institutions, including the Russian navy and army, the Caspian shipping administration Gocasp, the oil administration Azneft, railway station staff, and educational institutions such as the military academy and music conservatory. Each organizational body determined the composition of crowds in specific locations, and each of these groups had a different skill-set to contribute to the Symphony.

The Symphony was furthermore reliant on Baku's polynucleic spatial organization. The city's urban plan was formalized in 1897 to recognize the distinct districts that had developed in relation to particular industries and ethnoreligious identities (Alstadt-Mirhadi, 1986; Chodubski, 1986). Some of these districts functioned to separate the three majority ethnoreligious populations of the city—Muslim Azerbaijanis, Orthodox Russians and Gregorian Armenians—which were

involved in protracted conflicts throughout the city's history. Baku's districting further reflected its rapid industrialization in the mid-19th century, and the designation of particular city quarters for shipping-related activities, rail infrastructure and oil extraction and refinement. The spatial distribution of various human crowds and machine groups during the *Symphony of Sirens* therefore mapped logically onto existing sites where the city's oil industries, military and cultural organizations, and rail and shipping infrastructure were located.

After 10:30 am, machinic sounds took over as prompts to organize the urban spectacle. Cannon shots and insistent, anxious factory sirens signalled further movements of bodies and machines across the city. The first cannon volley signalled military and oil trade vehicles to drive 'roaring' to the central train station from oil drilling districts such as Zyk (at the eastern periphery of city), Bibi Heybat (at the southwestern edge of the harbour), and Bely Gorod (at the northern periphery of the city). The fifth sound of cannon fire signalled factory sirens to wail from the oil distillery factories in the Industrial districts on the northern side of the rail station and the 'Black City'. The 'Black City' was one of the earliest oil districts in the city populated largely by the Nobel drilling and refinery facilities. It was designated the 'Black City' in the 1870s when oil operations were industrialized, and literally referred to the oil that spewed from the oil derricks. The area is located just south of the main railway terminus, adjacent and east of the central city, with access to the harbour at the south.

The tenth cannon shot prompted additional sirens to sound from city centre trade offices, the oil companies' administrative offices, and whistle sounds emanating from Avraamov's proprietary steam-whistle machine. The machine had been placed aboard the destroyer *Dostoy*, which was by then moored in the harbour near the Customs ferry docks opposite the central square. At the fifteenth sound of the cannon, airplanes flew in formation over the city centre, from landing positions in the 'town districts'. By this term Avraamov was referring to the Muslim and Armenian Quarters of the city, located north of the central business district, and to the axial gardens that formed a border between them. At this time, it is likely that the hydroplanes also flew in formation from their position in the harbour. Avraamov categorized both airplanes and hydroplanes within the same class of technology, but only provided specific direction for the airplanes in his newspaper instructions.

The eighteenth cannon shot mobilized two further movements. The 'sirens of the depot and steam engines' in turn prompted a military brigade and brass orchestra to march from the central square to the railway docks along the harbour promenade. The 'depot' referred to the Transcaucasus Railway terminus, which was located just north of the central square. The 'steam engines' referred to the sounds of the trains stopped on the station tracks. In total, 25 cannon shots sounded to mobilize machine groups from spaces at different distances from Avraamov in the central square.

The first cannons marked the city's territorial boundaries at Zyk, Bibi Heybat and Bely Gorod. The sonic and visual effects of these first shots served to both establish the limits of the city *Symphony*, and provide the means for observers to imagine the city in its entirety. The *Symphony* enabled a total perception of urban space, which was a key ambition and conceit of the modernist avant-garde. The orchestration that followed the first cannon shots acknowledged various districts within the city limits. This suggests that a non-hierarchical

equivalence was imposed on spaces that were valued differently by cultural groups in the city. As a result, Avraamov intended for the Symphony to have a unifying effect on Baku residents. These intentions will be further explored in the next sections, which detail Avraamov's avant-garde and Soviet socialist affiliations.

Avraamov's instructions provided for a 'Pause' in the Symphony after the first 25 cannon shots, which prompted a spatial shift in the performance. In the Second Act, the Symphony performers moved to areas closer to Avraamov's position in the central square. The sounds emanating from the square were not muted as a result of their concentration in the city centre. The Symphony sounds probably reached distant city districts because the city centre lay within a topographical depression. Bounded by the harbour at the south, the train station at the north, the Black City at the east, and the Old Town, or 'Icheri Sherer' at the west, city centre sounds would have been amplified by Baku's topography. This would have had a sonic effect similar to an oversized gramophone horn.

Despite this spatial shift, the sequence of the Symphony from the First Act to the Second does not strictly correlate to a progressive amplification of sound, or its spatial equivalent: a progressive reduction of distance to the centre. Although the Symphony's Second Act was contained by the city centre, the crowds' movements continued to be prompted by sirens and whistles performed at a distance. This call-and-response produced a highly structured *reciprocity* of sounds and movements across the city.

The Second Act was furthermore remarkable for the way in which it introduced a different role for human participants. In the First Act bodies were employed as the invisible operators of machines. In the Second Act bodies were on display, operating like machines. The Pause marked a shift from the distanced layering of machinic sounds accompanied visually by large formations of machines, to the smaller-scale perception of bodies moving and sounding like machines. Avraamov's anthropomorphic characterization of machines and his conflation of human and machinic 'performers' indicate that the differences in the two acts were not the result of an opposition of man and machine. Rather, the two acts describe a new type of modern man. This man was inspired by the exhilarating machinic sounds produced by his labour in the First Act, and transformed as an embodiment of technological capability in the Second.

After the Pause, a cannon shot prompted columns of military cadets and musicians to march from the ceremonial square to the docks and back again, in a repetitive movement that suggested the operation of machine parts. The cadets and musicians effectively retraced the path of the Caspian flotilla, which had earlier assembled at the railway docks to drift approximately 3000 metres west along the harbour shore to the Customs Ferry docks. The sounds the human crowds produced were further suggestive of their machinic transformation. Familiar revolutionary songs were performed in cycles and repeated. A 'brass orchestra' and 'automobile chorus' had equivalent parts in performing the song 'Marseillaise', in an effort to blend the sounds of man and machine. Shouts in unison punctuated the crowd processions throughout the Second Act, in a form similar to the release of steam in factory whistles. Distant factory sirens and whistles in turn prompted responses from choruses near the central square. The overlapping sonic effect rendered the sounds of traditional instruments and the human voice indistinguishable, providing a "background for the principal collective" (Avraamov, 1923). In this grand spectacle of urban mechanization, the

'principal collective'—a metaphor referring to the proletariat—was constituted by an amalgamation of machinic and human sounds.

The overlay of sound and spectacle across the city transformed Baku into a 'mediatized space': one capable of amplifying aural and visual effects, conveying mood and producing a spatialized understanding of the spectacle's revolutionary narrative. In its ideological content, the Symphony is closely associated to the genre of Russian revolutionary mass spectacles. However, within this genre the Symphony's structure and form were unprecedented (which will be discussed in the final section of the paper). The next section will compare the Symphony to other revolutionary mass spectacles, and establish the strategic value of Baku to the internationalist aspirations of Soviet socialism.

### **The 'Symphony of Sirens' and Soviet Internationalism**

Baku's strategic importance to Soviet internationalism is best illustrated by the First Congress of the Peoples of the East, which Baku hosted from 1–8 September 1920. The Congress provided ideological context for the Baku Symphony of Sirens, which would take place two years later. It is also an example of the importance of performance to Soviet socialism. The Congress spanned several days, and included polemical speeches, conferences, street parades, agitational propaganda and volunteer labour activities. The performative aspects of the Congress are therefore typologically related to the revolutionary mass spectacles occurring at the time, and by extension, to the Baku Symphony.

Organized by the Soviet Central Committee, the Congress provided a forum to develop Bolshevik policies regarding Soviet national identity and colonialism (White, 1974). The primary themes were highly polemical, and included Soviet antagonism to the West, and the concomitant protective alliance that the Soviets wished to develop with the East. Fiery speeches expressed outrage at the European exploitation of resources in the Congress's location. Baku had produced at least half of the oil utilized in the First World War. Furthermore, Congress leaders deplored the historical conditions of European colonialism in the Global South more generally, and claimed that Soviet socialism could liberate the world's colonized proletariat. Over 2000 delegates attended. Many of the attendees were Moscow Party officials, but representatives also came from India, Persia the Central Asian states, China and Turkey (Riddell, 1993, p. 41). By its attendance and in its rhetorical edicts, the Congress demonstrated Soviet solidarity with the Asian colonized states; together these nations would be partners in the development of a socialist worldview.

Baku's strategic importance to Soviet internationalism was explicit in Chairman Zinoviev's opening statement to the First Congress of the Peoples of the East:

To your city has fallen the great honor of serving as the gate through which the Western proletariat is passing in order to extend its hand to the peasantry of the East. Your city is now the scene of new events, previously unknown in the history of mankind. . . . the Communist International made no mistake when it fixed this congress to be held in Baku. Its voice will be heard in London, in Paris, in Constantinople, and in New York. (1 September 1920, transl. in Riddell, 1993, pp. 50–51)

These comments characterize Baku as a communication gateway of Soviet socialism beyond Russia's territorial borders (see Figure 3). The message was directed to both Western capitalists and imperialists, and to the colonized masses in the East and South. Lenin would speak to this geographical imagination a few months after the Congress:

the socialist revolution will not be solely, or chiefly, a struggle of the revolutionary proletarians in each country against their bourgeoisie. No, it will be a struggle of all the colonies and countries oppressed by imperialism. (22 November 1920, transl. in Riddell, 1993, p. 261)

With this statement, Lenin expanded the constituency for the 'socialist revolution' from one solely composed of proletarian workers, to one that included those oppressed by colonialism and imperialism. In the context of the First Congress of the Peoples of the East, Baku was endorsed as a strategic location from which the 'socialist revolution' would be launched to liberate the Eastern toiling masses.

Baku was also a prime location to communicate the transformative power of Soviet socialism within its own borders to its international residents. From the late 19th century Baku was a truly cosmopolitan city. In the first Soviet census of 1926,

FIRST MAP SHOWING ROUTES OF BOLSHEVISM IN ASIA

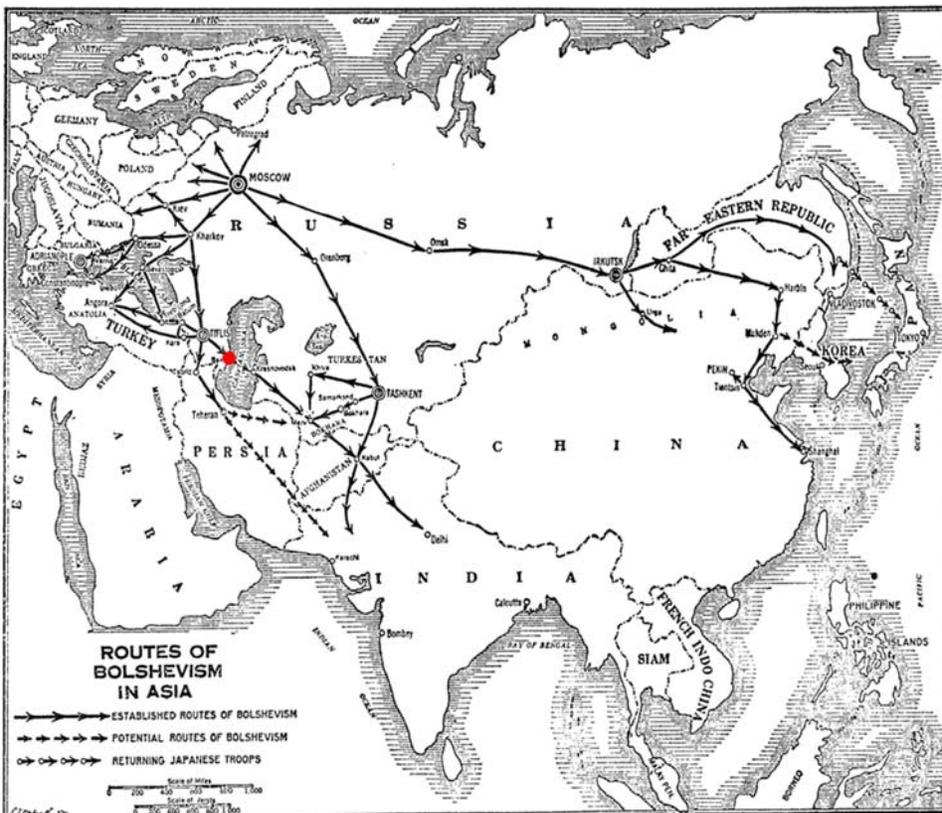


Figure 3. Annotated map locating the relation between Moscow and the spread of Bolshevism to Asian states via Baku. Source: Dennis, Alfred L. P. (30 July 1922) 'Soviet's Poker Game in Asia: First Map Showing Routes of Bolshevism in Asia', *The New York Times*, p. 88.

Baku's urban population was recorded at just under half a million residents, representing the fourth largest city in Soviet Russia (Semenov-Tian-Shansky, 1928, p. 635). The international composition of Baku's resident minority was largely a result of the oil boom that rapidly developed the city in the 1870s. Prominent among them were Nikolaus von der Nonne, a German architect who developed Baku's urban plan in 1897 and was City Building Director from 1898–1902, the Nobel brothers and the Rothschilds, who developed the largest oil extraction and refinery facilities in the city.

The message of the First Congress of the Peoples of the East also appealed to Baku's non-European residents. In 1920 Baku's majority population comprised three ethnoreligious groups: Muslims comprised a plural majority that oscillated between 35–45% and comprised natives from Azerbaijan and immigrants from Dagestan and northern Iran; approximately one-third of Baku's residents were Orthodox Russian; and one-fifth were Gregorian Armenian.<sup>4</sup> The Russian population in the city supported the country's turn to Soviet socialism. Russians held most city administration posts, formed the majority of the military, and held skilled jobs in railroad construction, mining and the oil industry (Alstadt-Mirhadi, 1986).

Socialist affiliations developed amongst the Azerbaijani intelligentsia in a series of underground movements around 1900 and reflected growing imperial resentment in the country (Swietochowski, 1978, p. 119). Before the October Revolution, Azerbaijan was controlled by the Russian empire. With the Urban Reform laws in 1870 (extended to Baku in 1874), Russia recognized the Azerbaijani intelligentsia with voting rights and increased participation in city council. However, Azerbaijanis continued to be severely limited in their political powers by imperial and Provisional Government administrators (Suny, 1972, p. 107; Rhineland, 1996, p. 88). In contrast, there was strong local stewardship of cultural and political organization in Baku. Before the 1917 revolution, the Azerbaijani elite steered Baku's cultural modernization—developing the arts, educational institutions (for girls and boys), and a liberal press that reported controversies to an extent unavailable to writers in Moscow and Petrograd (Alstadt, 1992, pp. 32–34). Socialism appealed to Azerbaijani intelligentsia as a strategic means to overthrow the tsarist administration. However, socialism amongst Baku elite was by no means homogeneous, and the variations amongst socialist movements reflected the struggle to define Azerbaijani identity within the city's polyglot, cosmopolitan context. Collective imaginaries formed largely along regional and religious affiliations (Swietochowski, 1978, p. 121).

Although Baku's proletarian base was not wholly convinced of the benefits of Soviet socialism, oil workers proved pivotal to the shift. In Baku, the 'proletariat' was majority Muslim. Muslims in Baku formed more than half of the population of oil workers, and therefore held labour positions that were critical to both Russian and international economies (Alstadt, 1992; van der Leeuw, 2000). In the end, Soviet socialism appealed directly to the oil workers by advocating improved labour standards and rights (Suny, 1972). As a result of this support, Azerbaijan was recruited into Bolshevism and formed a Soviet Socialist Republic in April 1920.

Five months later, the First Congress of the Peoples of the East took on a festive character in Baku. The Congress was an occasion for Committee leaders in Moscow and Petrograd to travel via 'agit-trains' through the southern frontiers

and Caucasus, stopping in rural areas along the way. Attendees also travelled via the Volga River and across the Caspian Sea in 'agit-ships'. Both modes of transport displayed socialist agitational propaganda, and formed a highly visible demonstration of socialism's expansion across Russian territory. On the third day of the Congress, organizers led a procession through Baku's streets that comprised "workers, women, youth and the schools, Persians and Turks, all the services of the Red Army... and congress delegates from all the nations" (Dutch Congress delegate Henk Sneevliet, cited in Riddell, 1993, p. 24). Indeed, socialist celebratory demonstrations were not uncommon in Baku in 1920. 'Subbotniks' were regularly organized in the 'Soviet East' in the months preceding the Congress. A 'subbotnik' was a Saturday given over to volunteer labour in service of socio-economic restructuration. The largest 'subbotnik' occurred in Baku in May 1920, in which it is estimated that 25 000 Baku labourers participated (Riddell, 1993, p. 21). Altogether, the meetings and activities associated with the Congress demonstrated the extent to which the *performance* of solidarity and proletarian ideals was critical to communicating and establishing Baku's strategic importance to the internationalist aspirations of Soviet socialism.

The importance of performance to Soviet socialism has been well documented in the spectacles, exhibitions, and cabarets that commemorated the October Revolution in Moscow and Petrograd (Cooke *et al.*, 1990; Edmunds, 2000; Schwarz, 1983; Stites, 1989; von Geldern, 1993;). On 8 November 1917, Anatoly Lunacharsky was appointed to lead the Commissariat of Education and Culture (Narkompros). Therefore, immediately after the Revolution, Narkompros and Proletkult took institutional control over revolutionary mass spectacles. From 1918 the Music Departments of both institutions organized concerts for proletarian audiences in factories, workers' clubs and schools (Edmunds, 2000, pp. 59–64). These venues were ideologically significant. The shift in venue from elitist concert halls to spaces for 'mass culture' was an attempt to bring revolutionary music forms in closer proximity to the proletariat. In doing so, these initiatives drew inspiration from the pre-revolutionary 'People's Conservatory', which extended opportunities for music education to the working class, and 'Historical Concerts', which offered reduced admission to 'historical' Bolshoi Theatre concerts (Schwarz, 1983, p. 5). After 1917, revolutionary mass spectacles typically comprised fiery speeches, recital of revolutionary verse and dramatic sketches. Many were held in factory spaces, workers' clubs and schools.

Others, such as Evreinov's 'Storming the Winter Palace' and Avraamov's Symphony of Sirens, took advantage of open urban spaces. Evreinov's mass spectacle was performed to reenact the revolutionary coup on 7 November 1920 (Deak, 1975). Hundreds of actors performed on Petrograd's palace steps and square, Neva River and bridge (eyewitness account in Rosenberg, 1984, pp. 138–140). The two-act narrative progression of Evreinov's mass theatre performance was similar to that of the 1922 Baku Symphony of Sirens. Both were structured to reflect the mythologized sequence of events during the October Revolution, and included an "image of unrest, or ongoing battle" in the First Act, followed by "the victory of 'The Internationale' army" in the Second Act (Avraamov, 1923). The Symphony's ideological content and proximity to the First Congress of the Peoples of the East demonstrates its association to revolutionary socialist performances in the period.

However, Avraamov's Symphony was distinct within the genre of revolutionary mass spectacles. Its takeover of Baku's urban spaces exhibited a

scale that far exceeded that of urban spectacles such as Evreinov's. The Symphony broke with previous direct representations of the revolution by excluding polemical speeches. Avraamov abstracted the Symphony's narrative structure (revolutionary battle, followed by triumph) with machinic sounds and repetitive and overlapping anthems. Evreinov's mass theatre approach to revolutionary commemoration had stronger affinities with 1920s Narkompros and Proletkult mass spectacle policy. In contrast, Avraamov's abstraction of the mass spectacle's revolutionary content developed from avant-garde theories.

This divergence was exemplified in the debates that arose within Narkompros on the relation between socialist ideology and revolutionary mass spectacles. Forming one side of the debate, Narkompros Commissar Lunacharsky wrote the following in 1920 in the journal *Theater Courier*:

In order for the masses to make themselves felt, they must outwardly manifest themselves, and this is possible only when, to use Robespierre's phrase, they are their own spectacle. ... until social life teaches the masses some kind of instinctive compliance with a higher order and rhythm, one cannot expect the throng to be able by itself to create anything but a lively noise. ... Celebration should be organized just as anything else in the world that has a tendency to produce a profound aesthetic impression. (transl. in Cooke *et al.*, 1990, p. 124)

With this statement, Lunacharsky suggested that Narkompros should standardize the form of mass spectacles. The Commissar recommended substituting previous spontaneous speeches and dramatic sketches with ordered mass enthusiasm. With this new ordered structure, the spectacles would metonymically convey the 'higher order' of socialism. Inspired by the spectacles, Proletarian masses would themselves embody the socialist spirit. However, Lunacharsky's recommendation had an uncanny resemblance to the liturgical and imperial processions that were common in Russia from the 18th century.<sup>5</sup>

Avant-garde theorists within Narkompros noted the affinities between the ordered celebrations suggested by Lunacharsky and imperial traditions. Alexei Gan, an artist in the Theatrical Section of Narkompros and a prominent theorist of Russian Constructivism, articulated an avant-garde perspective in the Narkompros mass spectacle debates. Gan suggested that by infusing the ordered structure of mass spectacles with Futurist principles, avant-garde spectacles would diverge from tradition. In 'A proposal for the organization of May Day festivities on the streets of Moscow', Gan wrote:

The task facing the Section of Mass Performances and Spectacles [of Narkompros] from the first moment of its activity has been to work out the first scenario of mass action, and to work out a magnificent drama in which *the whole city would be the stage* and the entire proletarian masses of Moscow the performers ... basing it on the idea of the Internationale, from which the international festival historically emerges as the first act of mass creativity on a world scale ... (8 February 1920, transl. in Cooke, *et al.*, 1990, p. 125; italics mine)

Gan's Proposal rehearsed several critical tropes for the proposed relations between Soviet socialism and mass spectacles. First he insisted that spectacles should be didactic, and in doing so he echoed Lunacharsky's 1920 imperative. Spectacles should teach the masses the value of order, and how to systematically

fuse socialist ideology into everyday routines. Second, to achieve Lunacharsky's recommendations and Futurist aims, or to "imagine the Communist city of the future", Gan insisted that mechanical sounds should be integrated in a highly ordered call-and-response with the masses. Third, cities were to function as *stages* for "acts of mass creativity", to communicate socialist principles on a *world* scale. Finally, Gan's statement insisted that despite the avant-garde's emphasis on new, Futurist art forms, avant-garde practices should be familiar and communicable to the masses. From its pedagogical to internationalist ambitions, avant-garde practices presupposed the relations between several scales: educating proletarian subjects—in city laboratories—that in turn performed globally.

Avraamov would have been intimately familiar with these debates as a result of his institutional affiliations. From 1906, Avraamov taught in the People's Conservatory and in this role emphasized the importance of folk music and choral (mass) forms in challenging Church and tsarist cultural control and elitism (Mally, 1990, p. 13; Nelson, 1993, p. 20). One week before the October Revolution, Avraamov participated with Lunacharsky in the first conference on proletarian cultural education organizations in Petrograd. In a panel with avant-garde writer and critic Osip Brik, Avraamov lectured on the relation between the musical arts and the masses, drawing from his pre-revolutionary involvement in workers' adult music education (Mally, 1990, p. 28). Avraamov also taught in the Rostov Conservatory in the mid-1920s, and briefly from 1922–23 in the Moscow Proletkult workers' club (Edmunds, 2000, p. 114; Nelson, 2004, p. 27).

Avraamov held a brief appointment as an Art Commissar for Narkompros in 1917. After Narkompros' administrative restructuring in 1921, Avraamov held a key musical position in the Scientific-Artistic Section of Narkompros' State Academic Council (Nelson, 2004, pp. 127–128). This position, at the intersection of technological advance and the musical arts, reflected Avraamov's broader interests in visualizing sound, machine-based musical forms and developing atonal scales (Avraamov, 1914, 1916, 1924). He would further develop this work in the 1930s in experiments with hand-drawn graphic musical scores, or what he called "ornamental animation in sound" (Edmunds, 2000, p. 78). These were early contributions to filmmaking. For these experiments Avraamov drew 53 geometrical figures (or ornaments), which he linked in various graphic sequences to produce musical compositions. Cameras photographed the ornaments on film, and sound was generated from film projections. Pitch was altered by positioning the cameras at different heights relative to the figures, volume was adjusted by the speed of capture, and harmony was achieved from multiple exposures. This vignette exemplifies Avraamov's interest in the radical unity of the arts, and illustrates his long-term commitment to avant-garde experimentation. At Narkompros, Avraamov had significant influence in defining early Soviet policy on the role (and appropriateness) of avant-garde music in representing proletarian culture (Sitsky, 1994, p. 3).

The Baku Symphony of Sirens functioned to demonstrate to Narkompros that there were advantages to developing avant-garde mass spectacles. Avraamov wanted the Baku Symphony to serve as a prototype for "every town with at least ten boilers", which referred to the minimum standard of modern industry needed in a city to develop similar revolutionary festivities (Avraamov, 1923). The Baku Symphony's role as a prototype spectacle, for distribution to other cities, further demonstrates that Avraamov sited his mass spectacle in Baku to reinforce the

city's and the Symphony's role in the geographical imagination of Soviet internationalism. In fact, Avraamov had planned two previous Symphonies in Petrograd (1918) and Nizhny Novgorod (1919), but the Baku Symphony was the first realized performance (Avraamov, January 1924, p. 50). However, the Baku Symphony did successfully generate institutional support to replicate the spectacle the following year. Avraamov had originally intended to locate the 1923 Symphony in Rostov-on-Don, but had to switch to Moscow when he encountered resistance from Rostov's local authorities (Avraamov, January 1924, p. 50). By contrast, there was political support for the Symphony in Moscow. This is evident in a Proletkult appeal to Moscow Factory Committees for worker participation in the Symphony of Sirens ('Document 52', transl. in Cooke *et al.*, 1990, p. 147), and the publication of a summary description of the Moscow Symphony in *Pravda*, the newspaper of the Soviet Central Committee, a week after its occurrence (*Pravda*, 14 November 1923).

By Avraamov's own comparison, the 1922 Baku Symphony was far more successful and 'utopian' than the 1923 Moscow Symphony (Avraamov, January 1924, p. 51). This was due in part to limited funding that resulted in the absence of key technological components such as shipping vessels, artillery, airplanes and hydroplanes (Avraamov, January 1924, p. 51). While the Moscow festival was conceived as a similar mobilization of crowds and industrial sounds, Moscow's expanse made a call-and-response orchestration untenable. Instead, the Moscow Symphony was largely confined to a Moscow Electric Power Station (MOGES) courtyard, above which factory whistles were mounted on a cross armature of steam-filled pipes (see Figure 4). Avraamov conducted from the roof of an adjacent building (see Fueloep-Miller, 1928, Figures 34 and 35). The composite result was that Moscow's Symphony of Sirens had a far more attenuated visual and aural effect (Fueloep-Miller, 1928, p. 184). It is important here to note that the Moscow Symphony was confined to the Power Station, and therefore limited as a mere emblem of technological possibility. In contrast, the Baku Symphony materialized a far more expansive technological imagination in the spaces of the city. The inspiration for the Baku Symphony's unprecedented, avant-garde realization of a 'total artwork' is the subject of the following section.

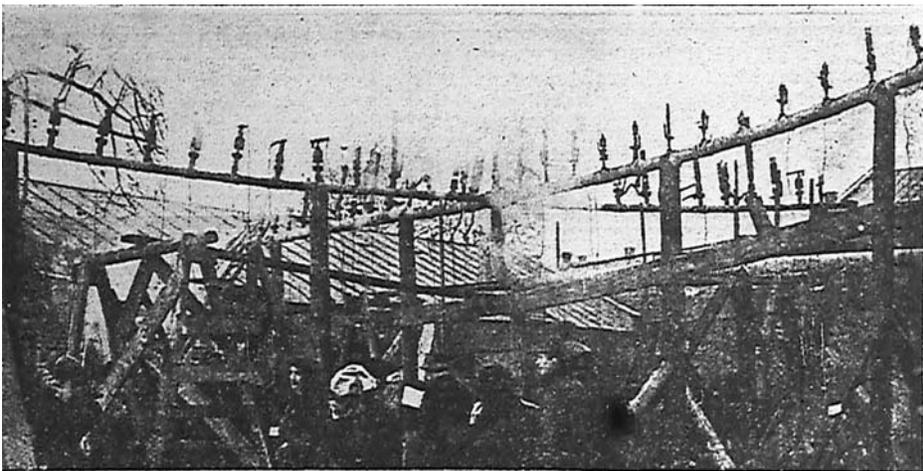


Figure 4. Photograph of the steam whistle armature above the Moscow Electric Power Station courtyard. Source: A. Avraamov (1924) 'Simfoniya Gudkov,' *Khudozhnik i Zritel*, 1, p. 50.

### The 'Symphony of Sirens' as an Avant-Garde *Gesamtkunstwerk*

Although the Baku Symphony of Sirens presented an extreme prototype to Narkompros and the genre of revolutionary mass spectacles, it was germane to avant-garde art theories in the 1910s and 1920s. Avraamov drew inspiration from fellow avant-garde artists and leitmotifs such as the relation between aesthetics and politics, the role of technology and mechanization in artistic production, and the transformative power of the 'total artwork', or *gesamtkunstwerk*, on communal de-individuation. Situated within these avant-garde tropes, the Baku Symphony of Sirens was nonetheless unprecedented. In 1922 it was one of the first realizations of a radical unity of the arts, technology, human labour and urban space.

The previous sections demonstrated that the Symphony of Sirens was site-specific, and relied on Baku's modernized urban conditions and strategic value for Soviet internationalism. To recapitulate: in 1922 Baku was a technologically sophisticated city with infrastructural networks of street electricity, telegraph lines and train, shipping and oil industries connected by elaborate trade systems to Europe and Russia (Henry, 1905, pp. 3–16; Bechhofer, 1921, pp. 291–324). Avraamov's Symphony of Sirens was sited with full awareness of the city's modernization, and the literal and imagined connections this frontier city had to Russia and the West. In response to these urban conditions, Avraamov orchestrated an ensemble of human crowds and machine groups in Baku's central square, streets, public gardens, industrial districts, rail station, airspace and harbour. The Symphony's performers produced a complex reciprocity of sounds across Baku, and the overlay of sounds and the mechanical movements of humans and machines effectively hybridized the two. The human crowds and machine groups filled the interstices between the termini of Baku's infrastructural networks, activating the spaces of the city with a mimesis of and enthusiasm for technological production.

The Symphony of Sirens in Baku activated dynamic relations between the arts, urban space, socialist politics and technology. It is precisely this nexus of relations that provides the connection between Avraamov's ambitions and contemporaneous avant-garde discourse. An excerpt from Russian avant-garde filmmaker Dziga Vertov's *Kino-Fot* essay, 'We. A Version of a Manifesto' is particularly probative in this context:

WE openly acknowledge the rhythm of the machine, the rapture of mechanical labour, the perception of the beauty of chemical processes, we hymn earthquakes, compose cine-poems to the flame and to power stations, revel in the movements of the comets and meteors and the gestures of the searchlights dazzling the stars. Everyone who loves his art seeks the essence of his own technique. (August 1922, transl. in Taylor & Christie, 1988, p. 70)

Vertov's manifesto enthusiastically endorsed the capacity of mechanization for synthesizing art and collective labour. In doing so, Vertov's manifesto captures the spirit of Avraamov's intention to hybridize man and machine. This hybridization formed the means by which a new, modern man could be organized in collective political action.

Avant-garde artist El Lissitzky was particularly interested in the relation between aesthetics and politics. Through his pedagogical affiliations and international exposure, he significantly influenced the direction of 1920s avant-garde

practices. Lissitzky taught at the Institute for Research in the Arts at Vitebsk (Inkhuk), exhibited and published widely in pan-European circles throughout the 1920s, and was the primary interpreter of the Suprematist artist Malevich's theories of space. In a 1920 essay entitled 'Suprematism in World Reconstruction', Lissitzky demonstrated how unifying artistic modalities could have radical political consequences:

We have left to the old world the idea of the individual house individual barracks individual castle individual church. We have set ourselves the task of creating the town. The centre of collective effort is the radio transmitting mast which sends out bursts of creative energy into the world ... this dynamic architecture provides us with the new theatre of life and because we are capable of grasping the idea of a whole town at any moment with any plan the task of architecture—the rhythmic arrangement of space and time—is perfectly and simply fulfilled for the new town ... (transl. by Koppers-Lissitzky, 1980, p. 332)

The above excerpt draws from the avant-garde notion that a total unity of the arts across the scales of objects, architecture and urban space would produce a new political consciousness for the masses. The total artwork assists in replacing individualism with a radical communalism. Communal de-individuation is rooted in the factories, cultural production and spirit of the modern metropolis. Activated by the arts, the city effectively becomes a 'new theatre of life' capable of generating and transmitting 'creative energy into the world'.

In his 1924 essay, Avraamov reinforced the critical importance of the city to avant-garde political objectives. Citing avant-garde poet and playwright Vladimir Mayakovsky as an inspiration for the *Symphony of Sirens*, Avraamov's essay included an excerpt from the 'Order to the Army of the Arts':

Out with cheap truths –  
Erase the old from hearts.  
Streets are our brushes,  
Squares are our palettes!

(Mayakovsky, 1918, republished in Avraamov, January 1924, p. 49)

Mayakovsky's passage foregrounds several key avant-garde tropes that Avraamov realized in the *Baku Symphony of Sirens*. First, there is the notion that traditional forms of music were inauthentic, and that only Futurist art forms could represent the true spirit of the time. Avraamov supported this claim, premising Mayakovsky's passage with the following: "The *Symphony of Sirens* is, in fact, a first attempt to overcome the 'chamber' nature of music" (January 1924, p. 49). The "streets" and "squares" that Mayakovsky mentioned provided a radical alternative to the "chambers" in which traditional music concerts were held. In support of this, Avraamov and Mayakovsky famously proposed that Narkompros requisition all pianos from their owners and drag them "out onto the streets" so that they could be modified and mobilized for the masses (Nelson, 2004, p. 33). In addition, the streets and squares signified two further vanguard leitmotifs: the need for revolutionary arts practices to be brought into greater proximity to the proletarian masses, and the notion that the urban fabric provided the tools and medium for avant-garde artistic production. The combination of this call for pianos and the radical spatialization of Avraamov's *Symphony* further suggested that while Avraamov insisted on Futurist, revolutionary art forms he

was equally concerned that it should be familiar and communicable to the masses. This ambivalence was similar to 1920s debates regarding photography's dual role as modern, avant-garde art form and a medium for mass consumption (see for example, Tretyakov, 1928/1980).

Avraamov further developed Vertov's and El Lissitzky's theories of the transformative capacity of the arts, writing in the introduction to his *Gorn* essay: "of all the arts, music possesses the greatest power for social organization" (1923, p. 109). Music for Avraamov was not merely an aural art form. Rather, music fused the visual, mechanical and spatial dimensions of life. With the sounds of machine groups and the dynamic movements of machine parts providing the models for collective action, Avraamov insisted that machine-inspired music could organize the masses. It also provided the masses with a means to represent their "complete harmony with the epoch" to themselves (Avraamov, 1925, cited in Edmunds, 2000, pp. 34–35). Avraamov defined this 'epoch' by referring to both socialist and proletarian politics, and a radically Futurist relation between man and machine.

Indeed, the notion that music had the transformative potential to unite the arts and effect the social and political reorganization of the masses was at the root of Richard Wagner's 19th century music theory of the *gesamtkunstwerk*. In the introduction to this section, it was posited that Avraamov's Baku Symphony of Sirens was one of the first realizations of a socialist *gesamtkunstwerk*, defined otherwise as a radical unity of the arts, technology, urban space and human labour. A full treatment of the influence of the *gesamtkunstwerk* in socialist avant-garde music is beyond the scope of this paper (see: Mally, 1990; Nelson, 1993, 2004; Schwarz, 1983; von Geldern, 1993). However, some context will suffice to substantiate this claim and serve as a preamble to the avant-garde theories of technology that inspired the form of the Symphony.

Avraamov's Symphony of Sirens belongs to a genre of avant-garde practices that synthesized disparate artistic modalities and modern technologies in the form of mass spectacles, theatrical performances, and music and filmic compositions. Prominent among these was Wassily Kandinsky's 1909 'The Yellow Sound', a dramaturgical staging of spiritual ecstasy through the interplay of colour and sound. Kandinsky directly referenced Wagner's *gesamtkunstwerk* in his attempts to develop intra-sensory effects from a multi-modal art work. Another Russian artist who experimented with the relation between visual and aural forms was Alexander Scriabin, who composed the tone poem 'Prometheus: The Poem of Fire' in 1910, and for which a colour organ was invented to translate the musical composition into projections of light and colour. Around the same time in 1909, F. T. Marinetti wrote his 'Futurist Manifesto', which glorified speed, war machines, polyphonic sounds and the dynamism of cities. Marinetti was a part of the Italian Futurist movement, but his Manifesto was well known amongst the Russian Futurists as a result of his travels to Petersburg in 1910 and 1913. The manifesto provided the inspiration for the 'machine music' tradition developed by Luigi Russolo (1913/1986), whose 'noise orchestras' were composed of 'noise machines' that evoked the sounds of everyday, industrial urban life. Russolo's first performance of the ideas generated in his 1913 'The Art of Noises: Futurist Manifesto' was the 'Awakening of a City', which was performed in a Milan theatre in 1914. This composition fundamentally challenged the use of instruments and tonal scales of traditional music compositions. However, unlike Avraamov's Symphony, it was confined to the space of the theatre and constrained by its incorporation of a traditional orchestra.

The closest precedent for Avraamov's use of the title 'Symphony of Sirens' was the poet Vladimir Kirillov's prescient mention of a 'symphony of labour' in 1918. In the context of a statement made at a Moscow Proletkult conference, Kirillov claimed that "soon a symphony of labor will ring out, in which the voices of machines, sirens and motors will join in one chorus with the voices of victorious workers" (Kirillov cited in Nelson, 2004, p. 27). A further precedent for the mechanical movements of Avraamov's Symphony performers can be found in theatre director Vsevolod Meyerhold's 'laboratory of biomechanics'. Outlined in his 1922 'Program of Biomechanics', Meyerhold developed a method of acting based on machinic movements for "new high velocity" theatrical performers (transl. in Hoover, 1974, p. 314). Notable developments of Meyerhold's experimentation with the hybridization of human and machine movements and sounds can be found in George Antheil's 1925 music composition 'Ballet Mecanique'. Later, Antheil and Fernand Leger developed an abstract film from the 'Ballet Mecanique', which featured the repetitive motion of machine parts. Similarly inspired by Meyerhold, in 1927 Shostakovich composed his experimental 'Symphony No. 2'. Dedicated to the tenth anniversary of the October Revolution, the Symphony featured sirens, highly structured and atonal instrumentation, and a choral finale composed of revolutionary verse.

Avraamov's 1922 performance provided the hinge between these early theatrical and musical experiments and later total artworks that sought to radically intertwine the sounds of humans and machines in the space of the city. The 1922 Symphony of Sirens enactment of mechanization across urban space out-scaled the 'city symphony' films that experimented with the montage of abstract city imagery, often with sound and without narrative structure (e.g. Paul Strand's 1921 'Manhatta'; Walter Ruttmann's 1927 'Berlin: Symphony of a Metropolis'; and Dziga Vertov's 1929 'Man with a Movie Camera'). These manifestos and concomitant experiments indicate that the first decades of the 20th century were replete with attempts to explore the radical unity of the arts and the modern technologies that shaped cities and new art forms.

However, the 1922 Symphony of Sirens remains distinct in that it was actualized outside of the texts, films and confined venues imagined by the experiments that preceded and followed Avraamov's. It occurred in the spaces of a modern metropolis. It involved a complex orchestration of a variety of machines commonly used in military, trade, transport and factory settings. Last but not least, music provided the means to radically incorporate human labourers, urban spaces and machine groups in an extended performance.

The writings of El Lissitzky, Vertov and Avraamov included earlier in this section also reinforce the prominence of modern technology in avant-garde art theory and socialist ideology. For Lissitzky, communications technology was particularly critical to the "task of creating the town". Indeed, Avraamov reinforced the notion that the "centre of collective effort is the radio transmitting mast" with his position on the Swedish mast during the Symphony of Sirens, and the aural and visual effects of the Baku spectacle (see Figure 3). For Vertov, the movements and possibilities of modern machines form the inspiration for the proletarian spirit. Here we have a Futurist theory of urban life, which embraced the dynamic technological, spatial and temporal qualities of modern, urban environments to effect radical social and political change.

Frederick Winslow Taylor's programme of scientific management was highly influential in shaping precisely these relations between art, society, technology

and space. After the Revolution, Russian technocrats and avant-garde artists took particular interest in Taylorism as a means to discard the feudal practices of the tsarist regime and to fund and discipline socialism (see also Lenin's pro-Taylorism declarations in 1918 in Bailes, 1977). Taylor's programme of scientific management in the late 19th century involved a methodical survey of the division of labour in factories to increase productivity and efficiency. Taylor's method for reforming labour began with time studies of industrial manufacture in which a particular job was divided into an assembly of labour contributions by different workers. Each worker's contribution was timed and analyzed, these times were averaged to determine a labour 'norm', and the operations considered unnecessary to the job were removed from the system as 'waste'. Time studies were similarly applied to the study of machines in systems of factory production. A certain norm of production was set by the time study, the labourer's rate of work was set to the pace of the machine, and workers were paid for the number of 'pieces' they were able to produce by achieving the norm. In short, it was a scientific method of standardizing both the factory and labour, and of conceptualizing efficiency as a unity of man and machine in rates of work, movement and setting.

Taylorism was to form the conceptual groundwork of avant-garde debates over the relation of art and labour, man and machine in the 1920s (Kemeny *et al.*, 1921/1990). These debates extended the question of the role of creativity in social and labour reform to questions of the role of the artist in instigating and representing this reform. Alexei Gastev, an avant-garde poet, factory worker and pioneer of scientific management, was especially critical to shaping the relations between the arts, technology and society. He was also a primary source of inspiration for Avraamov's *Symphony of Sirens*.

Gastev was involved in 1905 revolutionary activities as an agitator and organizer, was a member of the metal workers' union and a tram operator in Petrograd, and worked as a factory manager in Paris in exile before 1917 (Johansson & Gastev, 1983). After the Revolution, Gastev translated his labour experiences into evocative literary representations of the relation between art and machine. His Futurist poetry was praised by the avant-garde writer Mayakovsky, and credited by the theatre director Meyerhold as the inspiration for his 'laboratory of biomechanics' (Hoover, 1974, p. 314; Bailes, July 1977, p. 373). As a result, Gastev held a critical position at the intersection of proletarian advocacy, scientific management and avant-garde praxis.

In 1920, Gastev was appointed by Lenin to head the newly-formed Central Labor Institute, which was charged with rationalizing socialist labour. From its inception, the Central Labor Institute fielded intellectual disagreements on how to conceptualize the role of creativity and free will in labour production. Gastev's notion of a 'mechanized collective' was distinct in these debates: he suggested that labourers were not intrinsically creative. Gastev's opponent in the controversy was Bogdanov, the head of the Moscow Proletkult. Bogdanov argued for the notion of 'creative machinists' which suggested that in their creativity labourers were superior to factory machines.

By contrast, Gastev posited that industrialization had a reciprocal, transformational impact on both man and machine. Drawing from Taylor, Gastev insisted that machine rhythms and scientific measurement altered human behaviours and psychology. He claimed that through exposure to both collective labour and the magnificence of machines, the spirit and potential of labourers

would be elevated. In 1919, Gastev declared: “We are moving toward an unprecedentedly objective manifestation of things, mechanized crowds and a stirring, explicit grandeur totally free from anything intimate or lyrical” (transl. in Johansson & Gastev, 1983, p. 94). The faceless crowds would thereby be transformed by a collective enthusiasm for the wonders of the machine age. Gastev furthermore insisted that the machines themselves were in the process humanized as proletarian subjects (Gastev, 1919 cited in Bailes, July 1977: 378). This projected animation of the machine was prominent in Gastev’s writings. In Gastev’s ‘Packet of Orders: Order 02’ of 1921, he commanded the machines to rally as he would the proletariat: “To the machines. Stand up. Pause. Supply of attention. Feed. Contact. Shunt. Stop.” (transl. in Johansson & Gastev, 1983, p. 95).

Gastev’s concern for factory labourers was social, psychological and political. To address his concern for the joyless, repetitive days of the worker, Gastev repurposed the ideological content of factory steam whistles. He claimed them as a sonic diacritic of the workers’ liberated collective identity rather than symbols of monotony and toil. According to Gastev, factory sounds could provide a cognitive relation between pride and production such that workers could revel in the spirit of their work. In striking parallel to Avraamov’s own urban symphony, Taylorism influenced both the content of Gastev’s theories and the formal arrangement of his artistic representation. Gastev’s 1921 ‘Packet of Orders: Order 02’ simply illustrates this: Gastev’s poetic abstraction of Taylorism is reflected in his strict economy of word choice and the precision and speed that results from this delivery.

From this historical contextualization, we return to the Symphony of Sirens and Avraamov, who began his 1923 *Gorn* essay with a four-line excerpt from Gastev’s early prose:

When the morning whistles roar  
In the outlying districts  
It is not the call of slavery  
It is the song of the future. (‘Song of the Workers’ Blow’, 1919)

The Symphony radically expanded the factory whistles’ call to revolutionary work. Avraamov interpreted Gastev’s ‘mechanized collective’ as a sequenced transformation of both man and machine, spurred by the revolutionary spirit of the mass spectacle. The result was an extreme mechanization of bodies and an apparent infusion of revolutionary spirit in machines. This transformation did not occur in the factory; it took place in the spaces of the city. Accordingly, Avraamov’s multimedia spectacle augmented Gastev’s prose to purport a total artwork’s extreme agitational role (in both form and content) in service of Soviet socialism and Taylorism. Here we can recall for effect El Lissitzky’s proclamation that the hybridization of artistic modalities would initiate a “rhythmic arrangement of space and time” appropriate for the machine age (transl. in Koppers-Lissitzky, 1980, p. 332).

The Baku Symphony of Sirens restructured the time, routines and spaces of the city. The “arrangement of space and time” in Baku had a practical dimension during the performance of the Symphony. In the early 1920s, three different time zones co-existed in Baku, including Petrograd’s railroad time schedule, a regional time designated by Tiflis in Georgia, and a local (probably Persian or Turkic) time schedule (as described by oil engineer Arthur Beeby-Thompson (1908) upon visiting Baku). Quite simply, Avraamov needed to impose a standardized time to

organize the day-long Symphony of Sirens. The performance also had an impact on everyday life, and on 7 November 1922 it suspended everyday routines for several hours. The Symphony's insistent sounds and movements controlled the airspace, streets, waters and infrastructure of the city. The city districts were re-purposed to perform specific tasks. The skill-sets of various worker groups were directed to contribute to the overall work of urban mechanization.

The Baku Symphony of Sirens captures the essence of the avant-garde socialist interpretation of Taylorism. The dream was that the Taylorist imposition of a scientific, rational order would infiltrate all aspects of the new proletarian life, adjusting the spaces of leisure and work in service of the collective. The ways in which Avraamov drew inspiration from Gastev's work, and the form and effects of the Symphony demonstrate that he was fully immersed in the Soviet discourse on Taylorism. Furthermore, the Symphony established Avraamov's connection to the discourses on artistic experimentation, communal de-individuation and modern technology in the 1910s and 1920s. By extension, the Baku Symphony of Sirens was an unprecedented performance in the history of avant-garde practices, but absolutely committed to producing an avant-garde representation of the Soviet socialist reform project.

## Conclusion

The simple question that launched this research connects to two further inquiries that the Baku Symphony of Sirens helps to elucidate. The question, 'why was this avant-garde spectacle performed in Baku?' indicates the author's larger interest in how centre and periphery interacted to produce experimental discourses and artwork in the early 20th century. In Avraamov's institutional affiliations and the broader context of Baku in the formation of the Soviet international imagination, we have an example of the institutions and objectives that drove such an interaction. The author is also interested in the social construction of space, or how space is shaped by cultural, political and economic exchanges and exclusions. Within this broader interest, events such as the Symphony of Sirens become probative entry points to capture the contours of contemporaneous discourse, and the constellation of actors and theories that influenced and were impacted by the event. The Symphony of Sirens produced a call-and-response not only in relation to the movements and sounds of machine groups and human crowds across the city on 7 November 1922. It also developed from a call-and-response between centre and periphery, and between avant-garde practices and political ideologies.

More specifically, the Symphony of Sirens exemplified the avant-garde's desire to be an active and transformational force of revolutionary change. Through a radical unity of the arts, human labour, technology and urban space, the Symphony of Sirens signalled the possibilities of avant-garde practice. In doing so, the urban symphony effectively transcended the ethno-religious identities of Baku. While deemphasizing one's singular identity to reinforce the value of the Proletariat collective was typical of the Soviet socialist project, its specific function in Baku was provocative. This is especially apparent in relation to the nationalist and Muslim socialist movements that existed in the city and challenged Soviet socialism. The Symphony was yet another claim for the strategic value of Baku: from here the proletarian revolution could be symbolized and its influence could be spread to Asia, Africa and the world more generally. Certainly,

Baku's strategic value for Soviet socialist internationalism required geographic proximity to the East. Above all, a geographical imagination was required to reinforce the ambitions of another centre.

As a *gesamtkunstwerk* the Baku Symphony was intended as a prototype for this ambition. The Symphony of Sirens can therefore be understood as a total art work that took total control at an urban scale: it dismantled traditional barriers between art and audience, man and machine, Muslim and Russian, and worker and artist. It transformed otherwise relatively inert components such as technologies and urban spaces into performers. Connecting with several core tenets of the Soviet socialist and avant-garde movements, the Symphony extended the revolutionary imagination to impact the identity of an urban space, the political projects of a region, and transformative potential of the avant-garde.

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### Notes

1. Note that after 14 February 1918, Russia switched from the Julian Calendar to the Gregorian Calendar. Therefore, the 'October Revolution' is celebrated on 7 November, which refers to 25 October in the Julian Calendar.
2. The *Gorn* instructions and essay were translated to English in 1992 by Mel Gordon (Kahn & Whitehead, eds., 1992, pp. 245–252).
3. Avraamov's *Khudozhnik i Zritel (Artist and Viewer)* essay was translated by Alexander Kan & Kersten Glandien (Alarcón, 2008, 70–71).
4. Population estimates were extrapolated from the Russian census of 1913 and Soviet census of 1926. Baku census data were compiled from Semenov-Tian-Shansky, 1928; Harris, 1945; Altstadt, 1986.
5. For detailed discussions of these two pre-Soviet (liturgical and imperial) celebration typologies, see: McDowell, September 1974; Wortmann, 1995; Frolova-Walker, 1998, 2007. For comparison to Bolshevik festivals, see von Geldern, 1993, p. 16.

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