

Manufactured Proletariat: Constructivism and the Stalinist Company Town

GREG CASTILLO

University of California, Berkeley

A procession of clashing architectural styles documents the USSR's attempt to devise the environment for a socialist "new man." Of these, Constructivism is conventionally seen as an emblem of the Great Utopia, a vision of this project predating its totalitarian metamorphosis. But, for a reputation as the antithesis of "Stalinist" architecture, Constructivism's timing is problematic, to say the least. Constructivism came into its own during the First Five-Year Plan (1928-32), an era that witnessed the rise of Stalin's "cult of personality" and his campaigns to collectivize agriculture and industrialize at breakneck speed. This period, marked by the emergence of the Stalinist state, corresponds to the building of Constructivism's canonic monuments.'

In servicing the First Five-Year Plan, Constructivist architects undertook two promethean tasks: to create simultaneously the infrastructure for Soviet industry and for its new proletariat. They saw machine-age planning and a scientific theory of aesthetics as architecture's contributions to an alchemical transformation of society. Socialism's ideal environment would be determined by designers in partnership with the state enterprises that were their clients. Accordingly, Constructivist schemes for "the socialist city" were avant-garde variants of what in capitalist contexts is known as "the company town."

UNIVERSITIES OF LABOR

Industrial technology assumed a position at the very heart of early Soviet politics and culture. From the miracles of mass production, Bolshevism spun a story about economic, social and human transformation. As the leading edge of revolution, the Communist Party took on the responsibility for shepherding a largely agrarian population through this metamorphosis. Injecting the West's industrialism with communal forms of labor would transform specimens of what Lenin once called "the Russian savage" into the "cultured, conscious, educated workers" essential to socialism.'

A politically-engaged avant-garde celebrated this goal and gave it aesthetic expression. "Off to the factory, the creator of the highest springboard for the leap into the all-encompassing human culture," effused the authors of the manifesto

"From the Constructivists to the World." El Lissitzky, who helped found Switzerland's Constructivist architectural association (but declined to join its Soviet equivalent), declared the factory "the crucible of socialization for the urban population" and "the university for the new Socialist man."⁴ Constructivists venerated machine environments for their ordained capacity to transform human nature. Aleksandr Vesnin praised engineering's invention of "objects of genius" and called for artists to create devices equal in the "potential energy of their psycho-physiological influence on the consciousness of the individual."⁵ The factory was considered the most potent specimen of the "social condenser" - building types that, while fulfilling basic social needs, instilled socialist modes of behavior and thought. The communal housing complex, known in Russian as the *zhilkombinat* or "dwelling-factory," was another example. As a new building type, the commune was seen as a means to restructure the hierarchical relationships of the family, liberating the housewife and allowing her to participate in proletarian rather than bourgeois labor. Public laundries, public baths, the creche, and the "factory-kitchen" - a cafeteria that served meals on the premises or to-go - all conserved state investment by communalizing services traditionally duplicated in individual residences, and had ideological connotations like those of the communal house. The workers' club was the social condenser formulated as a replacement for church and tavern. A "Red Corner" in the club's reading room appropriated for portraits of Lenin and Stalin the tradition of hanging icons in corners. Early attempts to invent a body of socialist ritual modelled the clubs' events after religious ceremony: marriage, for example, was celebrated here with a "Red Wedding."⁶ Workers' clubs were built to serve communal residences, trade unions, neighborhoods, and factories. The late-1920s saw disproportionate growth of the latter category, and factory clubs constitute the majority of the celebrated exemplars of this building type.

THE AVANT-GARDE ESTABLISHMENT

Creating social condensers was "the essential objective of Constructivism in architecture," according to Moisei

Ginzburg.' "Today the concept of 'architecture' only has meaning," he insisted, in its application to "...tasks of life-building, of organizing the forms of the new life."⁸ This endorsement of total design reflected the possibilities inherent in the patronage of a powerful state (or its various ministries and administrative branches), and bolstered the design profession's self-image as the Party's indispensable partner in forging a socialist society. Constructivists were poised to thrive in the new order. Constructivism's professional organization, the OSA, was registered with Moscow authorities under the designation "specialists oriented towards industrial buildings."⁹ This was no mere self-promotion. A critical phase of the movement's incubation took place between 1924 and 1925 at the Moscow Higher Technical College, MVTU. Its Faculty of Industrial Building was established by Aleksandr Kuznetsov, known as one of the "founders of the Russian school of industrial construction."¹⁰ Kuznetsov hired Viktor and Leonid Vesninas faculty in 1923. Their résumé of built work included workers' housing, an electrical power station, and chemical refineries. It was also at the MVTU that Moisei Ginzburg taught architectural theory and history as he composed the manifesto *Style and Epoch*. With *Style and Epoch* Ginzburg elaborated a design methodology that he described as Constructivist. He outlined a two-part analogy linking the machine on the factory floor with the architecture of the socialist city. Just as mechanical functions organized factory design, so would the factory exert its influence on residential and public buildings, creating a landscape of modernity modeled on industrial paradigms." Ginzburg's theorizing was motivated in no small part by the desire to create a working method for a "monistic architectural system," an environmental order Ginzburg considered impossible to achieve under capitalism.¹²

THE COMPANY TOWN

Contrary to Ginzburg's assertions, the "absolute monism" he identified as the goal of a Constructivist method had proven under capitalism not to be impossible, just unprofitable. Ironically, Soviet architects initiated their search for a unified, reformist urban order centered on the factory just as many industrialized nations were abandoning the company town, the capitalist version of that paradigm.

The simplest definition of the company town is one built and operated by a single enterprise. The "works," whether a mill, mine, or factory, usually dominated its community visually, but always did so ideologically. In capitalist company towns, churches, playing fields, and alcohol-free watering spots served as platforms for indoctrination. The values inculcated were those of management's ideal laborer: hard-working, clean-living, punctual, and dependable.

The model company town represented management's gamble that construction and maintenance expenses would be paid back through worker performance and good public relations. America's last boom in company town construction occurred in the South and ended with the Great Depres-

sion. With the help of architects specializing in planned industrial communities, textile mill owners planted new settlements across the Carolinas and Georgia and stocked them with cheap, unskilled labor and automated machinery.¹³ Production practices in these company towns proved inspirational to visiting Soviet cotton industry representatives in the early-1920s, and resulted in a bid to cultivate Taylorism in Soviet mills as a new model of socialist labor.¹⁴ But there was no need for Soviet managers to travel to America to absorb the reformist innovations of the late-model capitalist company town. These were available for study in their own backyard.

LESSONS FROM "RUSSIA'S MANCHESTER"

The mill town of Ivanovo-Voznesensk played a pioneering role in the development of the Soviet company town. Located about 150 miles northeast of Moscow, the community was the nucleus of a rural textile district dotted with mill towns of pre-revolutionary provenance. Industry was dispersed across the landscape in towns comprised of a factory and its workers' colony. This settlement pattern presaged conventions espoused by the Soviet state and many of its avant-garde architects in the latter 1920s.

As one of the first targets of large-scale Soviet redevelopment, the area around Ivanovo-Voznesensk reaped the bounty of an investment scheme that predated Stalin's industrial "revolution from above." Lenin's New Economic Policy (NEP) of 1921 conceded that, for the time being, the USSR's industrial future remained in the hands of peasants. Private control over agriculture made the peasantry a de-facto entrepreneurial class. Soviet power would dwindle unless the state came up with something to barter for food. Fabric was always in demand by peasants, and the state controlled its production facilities, which had been expropriated in the Revolution's opening act. Calicoes and cheap cotton prints were suddenly of strategic importance to the USSR's survival, a fact soon reflected in the flow of state investment capital.

In 1924, Viktor Vesnin was placed in charge of the reconstruction of a worker's club begun in 1913 and built for the pre-Revolutionary factory town associated with the cotton mill of Viktor Konovalov and Son¹⁵; a project that proves false Constructivist claims that the Soviet worker's club was "developed after the Revolution: (as) absolutely independent objects, without model or tradition."¹⁶ Constructivists were also well-represented in a 1924 competition for a new worker's club for the mill town Ivanovo-Voznesensk, with entries by Ilia Golosov and the Vesnin brothers, among others. Golosov and Moisei Ginzburg also submitted designs the following year for a "House of Textiles" in Moscow. The brief was for the industry's centralized administrative headquarters, which was to contain office space and a hotel, restaurant, and general store. In heralding both the new Soviet worker's club and the elaboration of factory bureaucracies as well-provisioned fiefdoms, both competitions foreshadowed the institutions of an approaching era of Stalinist heavy industry.

THE SOVIET COMPANY TOWN

The textile industry of Ivanovo-Voznesensk was a laboratory for the factory-managed settlement characteristic of the First Five-Year Plan's *novostroiki*, or "new constructions." The "Year of the Great Break," 1929, marked the state's wholehearted plunge into such projects. The goal was to overtake capitalist nations, and manufacturing capacity was the measure. Technological prowess would be a hard-currency import. The superadditive effect of socialism and Western machinery would guarantee unprecedented productivity levels. Capitalist greed was to yield a delicious irony: the emergence of the USSR as a manufacturing superpower, and a total eclipse of the West.

The Plan called for 300 new cities: two-thirds of them organized around manufacturing plants, the rest around agro-industrial facilities designed to bring the factory's labor and life patterns to agriculture. Socialist towns would collectivize laundry, bathing, cooking, and recreational facilities for communities of 40- to 60,000 communal apartment residents." Translating statistics into assimilable images, a Soviet schoolbook written to promote the Plan explained: "A socialistic city will be entirely different from the city that we know. Its center will be, not a fortress, or a market, but a factory or an electric station....Every future city will be a workers' village near a factory.""

The urban geography may have been reductive, but the analogy was precise. By 1930 the state had stripped city soviets of autonomy over local development, setting the stage for centralized urban planning by huge centralized state trusts. For architects and planners it was to be the debut of history's biggest new-towns program. Competing Constructivist schemes proclaimed the end of metropolitan hegemony through an averaging of rural and urban landscapes, while simultaneously assaulting the overlapping of agrarian and industrial labor patterns long-established in Russia.

Dominant paradigms for the socialist city prescribed a domain in which individuals were organized into a *proper* proletariat, employed full-time as industrial wage earners. With all workers living in collectives and employed in industry or its service sector, an established pattern of households supported by both wages and small-scale farming would disappear. It was a proposal of proven utility to management. Soviet experience at Ivanovo-Voznesensk had shown that workers who still had ties to the land were more likely to be disengaged from mechanistic constructs of time and resisted Taylorist rationalization campaigns more easily than workers completely dependent on wages.¹⁹ The proletariat envisioned by the Soviet State and its modernist architects would not be able to fall back upon on the family cow and garden plot for food during a showdown with factory management.

Aleksandr and Leonid Vesnin's 1930 general plan for the Siberian new town of Novokuznetsk is paradigmatic. Their plan features three residential districts composed of communal superblocks. Arrayed around a broad square at the

factory's gates are the town's administrative and public buildings, which include a House of Soviets, a technical institute, and state commercial enterprises." This Constructivist rendition of the company town is a diagram as hierarchical as any ever planted by a capitalist magnate.?"

UTOPIA IN TATTERS

Constructivism's city of social condensers was to be realized through rationalized construction, standardization, and mass production. These strategies harmonized with the First Five-Year Plan's vision of a revolution through technology, and it was here that both the Plan and its signature architecture floundered. Technology purchased at great expense arrived at sites lacking an infrastructure of skills and supplies. Machines, it turned out, were *consumers* of industrial development, not simply its means of reproduction. As imported technology failed to work its magic, Soviet managers, pressed to meet untenable quotas, increasingly traded off mechanization for manpower, a resource in abundant supply as peasants fled the land to evade the state's brutal program to collectivize agriculture. The undercapitalization of Soviet industry pushed town-building to the bottom of management's list of priorities, with predictable results. As at certain New England mill towns, construction workers remained partially or fully disenfranchised from the factory welfare system. In the USSR, as in America a century earlier, new manufacturing centers found themselves encrusted by a district of "mud huts" built by immigrant labor.²²

In the etymological sense of being found at no place, the socialist city visualized by Constructivists remained truly "utopian." Its tangible legacy was instead a fragmentary collection of individual social condensers. A review of this built heritage reveals that here too visionary theory overshot its capacity for execution. Constructivist buildings in most cases either fell short of expectations, or fulfilled them in ways that are usually associated with "high" Stalinism rather than its avant-garde preamble.

Factories, it should be recalled, were the most vaunted of all socialist condensers. Why so few of them are attributed to Constructivists deserves a note of explanation. When Soviet delegates on a 1929 visit to Detroit learned that Ford plants at Highland Park and River Rouge were the work of Albert Kahn Inc., the company was immediately contracted for work in the USSR. It was a highly productive relationship. During the firm's three years in Moscow it planned over 500 industrial facilities, and left behind blueprints that accounted for the replication of many others.?" Soviet factory design was largely an American import rather than a domestic product.

Excluded from that market, Constructivists turned their efforts to the factory's adjacent residential apparatus. One component was the factory-kitchen, a social condenser with a virtuous reputation peculiar to Soviet propaganda and Western architectural histories. The specimen at Dneprostroi, designed by Viktor Vesnin, was a filthy place featuring long lines, high prices, and tainted food in portions well below a

worker's subsistence-level caloric intake.'? Magnitogorsk's cafeteria specialized in serving up gastro-intestinal epidemics. Conditions at the factory-kitchen at Ivanovo-Voznesensk were grim enough to help fuel a strike.²⁵

The public reception of the housing collective was mostly negative as well. The single kitchen shared by eighty apartments in Magnitogorsk's first communal superblock was a place of constant feuding and episodic theft.²⁶ Workers living in Dneprostroi's purpose-built commune ignored the assignment of washing, cooking and leisure activities to shared rooms, and reallocated these spaces to support the archaic familial patterns that these social condensers were intended to reform."

The Constructivist theorist Moisei Ginzburg took a different approach to communality. Sensitive to the resistance enforced collectivity might provoke, he provided the 1927 apartment block of the People's Commissariat of Finance (Narkomfin) with a galley kitchen in each unit. Residents could make their own decisions about whether or not to dine at the communal canteen. Encouraging a new way of life without imposing it made this the *dom perekhodnogo tipa*, or "house of the transitional type." The best known of all Constructivist residential designs, this building did entail a transition, but it was not to a communal lifestyle. Narkomfin's company housing consisted of 50 apartments: this for an organization that counted 37,000 employees three years after the building was completed.²⁸ A clue to the building's residential demographics is suggested by the architectural historian Anatole Kopp, who writes that the block was built "for the officials of Narkomfin."²⁹ As industrialization pulled resources away from consumers and caused standards of living to plunge, the in-house amenities of buildings like Ginzburg's Narkomfin block provided interiorized consumer landscapes that allowed a managerial elite to enjoy comforts unknown to the rank and file. Not the least of these was a private apartment, no matter how small: a princely luxury in a city dominated by cramped ad-hoc communal living arrangements. Narkomfin was also designed to include a cafeteria, gymnasium, library, day nursery and roof garden. Rather than access to an egalitarian material culture, Ginzberg's Constructivist "house of the transitional type" heralded a transition to the unrepentant elitism of later Stalinist housing."

Human transformation also eluded the workers' club. Campaigns to induce workers to retire to clubs at the end of their shift hardly dented proletarian alcoholism. Concocted rites and festivities, deemed "boring, dreary, and tiresome" by Soviet observers, withered in popularity." Failing to replace their sacred counterparts ritually, workers' clubs sometimes displaced them outright through physical destruction instead. Constructivism's embrace of the healing power of demolition was implicit in its theory of the social condenser. If a Constructivist building could be "a workshop for the transformation of man," as El Lissitzky put it, then other structures were his potential unmaking. An article in the Constructivist journal *SA* bears this out, claiming that capital-

ist workers' housing was designed "to replace authentic, international, working-class thinking by another way of thinking - the petit-bourgeois way of thinking...."?" If the peasant comprised the raw material of a proletariat, environments capable of contaminating the "new man" with his former class-nescience had to be demolished. Places of worship were foremost among the targets. Religion was slated for extinction.

Constructivist commissions helped advance this project, as illustrated by the Proletarskii District Palace of Culture. a workers' club attached to the Likhachev Auto works near Moscow. The building was the product of a 1930 design competition won by the Vesnin brothers, who considered it to be one of their most significant works. The site's former occupant, Moscow's venerated Simonov monastery, is rarely mentioned in either Soviet architectural journals of the period or in Western histories of Constructivism. The monastery's famed pilgrimage churches (the oldest dating to 1405) and its 93-meter-high bell tower had survived blazes set by Napoleon's retreating troops. Dynamite reduced them to rubble in a single day in order to clear the site for one of Soviet modernism's canonic monuments. The monastery also vanishes in Ivan Leonidov's unpremiered, but equally famous, competition entry. The use of demolition as a strategy for social reform in these two celebrated Constructivist projects traces another continuity between the design strategies of Stalinist modernism and Socialist Realism, its neoclassical successor.³³

A CONSTRUCTIVIST POSTSCRIPT

The First Five-Year Plan concluded in a nation transfigured. By 1931, new towns rose at over sixty major industrial sites. Older cities were also transformed by manufacturing concerns. As the command center of smokestack socialism, Moscow was refashioned into the capital of a company town archipelago. Company townscapes sprouted along its suburban periphery. As Soviet social historian Steven Kotkin notes, "In the USSR, virtually all towns had become company

Industrialism's centralized management soon characterized cultural production as well as manufacturing. In 1932 all independent architectural associations were disbanded by Party directive and folded into an All-Soviet Architects' Union, with the neoclassicism of Socialist Realism as its official idiom. Constructivism now fell out of favor and was portrayed as a heresy incompatible with Stalinism. Yet within the new order, former Constructivists continued to serve Stalin's industrialization campaign. After the death of Leonid Vesnin in 1933, brothers Aleksandr and Viktor joined the stable of design talent maintained by the People's Commissariat of Heavy Industry, known in Russian by its acronym, Narkomtiazhprom." Narkomtiazhprom was the hub of policy and decisionmaking for the immense empire built around Soviet heavy industry. Mosei Ginzburg found a position at here as leader of Studio #3 in its in-house design

department. Leonidov joined Ginzburg's studio in 1933, and in that same year drew up what architectural historians now hail as Constructivism's lyrical swan song: his competition entry for Narkomtiashprom's new headquarters.

The headquarters' proposed location, fronting Red Square directly opposite the Lenin Mausoleum, celebrated the state's program of heavy industry as the pith of Soviet socialism. The competition's first round entries comprised a roll-call of the former avant-garde. The Vesnins submitted a design for a bilaterally symmetrical behemoth garnished with heroic sculpture - clearly an attempt to satisfy the vague new injunctions of Socialist Realism. With the addition of Ginzburg as a new partner, their design team made it into the second (1935) and third (1936) rounds of the competition.

Leonidov's entry, jettisoned by judges after the first round, rendered all other contenders prosaic. Here the building's complex brief engendered a menagerie of sculptural form. Three idiosyncratic highrises were to rise from a stepped slope that served as a viewing stand for mass processions in Red Square. "Until now the Kremlin and St. Basil's Cathedral have been the architectural center of Moscow," Leonidov explained. "I feel that (they) ...should be subordinated to the Dom Narkomtiashprom, and that this building itself must occupy the central position of the city."¹¹ With a total built volume of over one million cubic meters, the complex would have challenged the planned Palace of the Soviets as the capital's dominant structure. In both in word and deed Leonidov demonstrated a clear grasp of the corporate body he was outfitting.

Nothing came of Dom Narkomtiashprom. After the third round of competition the site was shifted south to the edge of the Moskva. In 1938 the colossal bureaucracy was disbanded and split into more than a dozen separate commissariats. One of the last projects built under the auspices of Narkomtiashprom, the Commissariat's mountainside resort in Kisiovodsk, was completed the same year.³⁷ The architect-in-chief was Ginzburg; landscape design was by Leonidov.

Designs for the Commissariat of Heavy Industry's corporate headquarters and vacation retreat constitute critical research documents, and not simply as catalogs of form for designers today. The Commissariat was a prototypical institution of the Stalinist system, coordinating an industrialization campaign that by the end of 1934 counted among its employees well over one-half million peasants in forced-labor settlements.³⁸ Commissariat designs by Leonidov, Ginzburg, and the Vesnins refute the simplistic formulas so often applied to Soviet design, which describe its modernist phase as utopian, and its neoclassicism as totalitarian.

The recognition that Soviet modernism, like Stalinism, was a complex phenomenon with multiple phases, clarifies the research question facing architectural historians: not whether or not Constructivism was a tool of the Stalinist system, but rather when it became one. The Stalinization of the USSR's industry and avant-garde were parallel events, and logically so. Constructivism shared some of its basic premises with Stalin's First Five-Year Plan. These included

an enthusiasm for mechanical technology that bordered on fetishism, an aversion for the hodgepodge of cultures, economies, and townscapes inherited from the past, the ambition of installing a monolithic industrial society in its place, and the association of all of these with socialism. A body of architectural theory and praxis consistent with this approach emerged in the mid-1920s, at the time of the Party's strategic debate on industrialization. The state and its avant-garde architects deployed a reformist company town as the paradigm for a socialist welfare system and its urban environment. By 1929, with Stalin's call to arms for the assault on an industrial future, architects were ready to offer a vision of the socialist man's new environment and a collection of innovative building types designed to bring that human prototype to life. It is true that these avant-garde visions were realized only in fragments and were ultimately repudiated by their former patron. Still, Constructivism's complicity in transforming the "base" and "superstructure" of Soviet society in accordance with Stalinist designs is incontrovertible, the orthodoxies of contemporary architectural history notwithstanding.

NOTES

- ¹ For the unabridged text of this paper, see: Greg Castillo, "Constructivism and the Stalinist Company Town." *Urban Design Studies* (University of Greenwich, England). Vol. 2. 1996, pp. 1-20. For a discussion of the historiography of Constructivism see Greg Castillo, "Classicism for the Masses: Hooks on Stalinist Architecture." *Design Book Review* 34/35, (Winter/Spring 1995), pp. 78-88.
- ² V. I. Lenin. "Letter to I. I. Skvortsov-Stepanov, 19 March, 1922, and "Report on the Work of the Central Executive Committee"; cited in Anne D. Rassweiler, *The Generation of Power: the History of Dneprostroi* (New York, 1988), pp. 25, 15.
- ³ V. K. Medunsky and G. Stenberg, *From the Constructivists to the World* (Moscow, 1921); cited in H. Gafner and E. Gillen, *Zwischen Revolutionskunst und Sozialistischem Realismus*, Cologne: 1979, p. 114, my translation.
- ⁴ El Lissitzky, *Russia: An Architecture for World Revolution*, trans. Eric Dluhosch (Cambridge MA, 1970), pp. 57-8.
- ⁵ Alexander Vesnin, "Credo" (unpublished manuscript dated April 1922); cited in Catherine Cooke, *Russian Avant-Garde Theories of Art, Architecture, and the City* (London, 1995), p. 98.
- ⁶ Richard Stites, *Revolutionary Dreams: Utopian Vision and Experimental Life in the Russian Revolution* (New York, 1989), p. 110.
- ⁷ Moisei Ginzburg, "Report on the First Conference of the Union of Contemporary Architects. Moscow," SA, 1928, 5; cited in Anatole Kopp, *Constructivist Architecture* (London, 1985), 70.
- ⁸ Moisei Ginzburg, "Konstruktivizm kak metod laboratornoi i pedagogicheskoi raboty." SA, 6, 1927, pp. 160-6; cited in Cooke, *Russian Avant-Garde*, p. 102.
- ⁹ Cooke, *Russian Avant-Garde*, p. 164.
- ¹⁰ Igor A. Kazus, "Architektur-Avantgarde im Ural und in Siberien," in Christian Schädlich and Dietrich W. Schmidt, eds., *Avantgarde II: Sowjetische Architektur 1924-1937* (Stuttgart, 1993), p. 63, (my translation).
- ¹¹ *Ibid*, p. 109.
- ¹² Moisei Ginzburg, "Konstruktivizm v arkhitekture." SA, 5, 1928, pp. 143-5; cited in Cooke, *Russian Avant-Garde*, pp. 102-3.
- ¹³ Margaret Crawford, "Earle S. Draper and the Company Town in the American South," in Garner, *The Company Town*, p. 143.
- ¹⁴ Chris Ward, *Russia's Cotton Workers and the New Economic*

- Policy: Shop-floor Culture and State Policy 1921-1929* (Cambridge: Cambridge University Press, 1990), pp. 144-45.
- ¹⁵ Igor N. Chlebnikov, "Architektur der zwanziger und dreissiger Jahre im Industriegebiet von Ivanovo-Voznesensk: Sozialutopische Aspekte und die Avantgarde," in Schadlich and Schmidt, *Avantgarde II*, p. 44.
- ¹⁶ Michel Ilyine, "L'architecture du club ouvrier," *Architecture d'aujourd'hui*, 8, (November 1931), p. 17 (my translation).
- ¹⁷ S. Frederick Starr, "Visionary Town Planning during the Cultural Revolution," in Sheila Fitzpatrick, ed., *Cultural Revolution in Russia, 1928-1931* (Bloomington IN, 1984), pp. 210-11, 230.
- ¹⁸ M. Ilin, *New Russia's Primer: The Story of the Five-Year Plan*, trans. George S. Counts and Nucia P. Lodge (Boston, 1931), pp. 153-155.
- ¹⁹ Chris Ward, "Languages of Trade or Languages of Class? Work Culture in Russian Cotton Mills in the 1920's," in Lewis H. Siegelbaum and Ronald Grigor Suny, eds., *Making Workers Soviet: Power, Class, and Identity* (Ithaca, 1994), pp. 208-09, 215.
- ²⁰ Kazus, "Architektur-Avantgarde im Ural", in Schadlich and Schmidt, *Avantgarde II*, p. 59.
- ²¹ Compare, for example, this Soviet company-town plan with that of the British company town of Saltaire, described in Spiro Kostof, *The City Shaped* (Boston, 1991), pp. 169-71.
- ²² The New England experience is cited in Wright, *Building the Dream*, pp. 61-72. The Soviet legacy of mud huts is recounted in Steven Kotkin, *Magnetic Mountain: Stalinism as a Civilization* (Berkeley and Los Angeles, 1994), pp. 175-78.
- ²³ Federico Bucci, *Albert Kahn: Architect of Ford*, (Princeton, 1993), p. 92; Grant Hildebrand, *Designing for Industry: The Architecture of Albert Kahn* (Cambridge MA, 1974), p. 129.
- ²⁴ Rassweiler, *The Generation of Power*, p. 151-3.
- ²⁵ For Magnitogorsk see Kotkin, *Magnetic Mountain*, 172; on Ivanovo-Voznesensk: Jeffrey Rossman, "Worker Resistance Under Stalin: The Collapse of Shop-Floor Morale and the Strike Movement of April 1932" (Ph.D. diss., University of California at Berkeley, in progress).
- ²⁶ Kotkin, *Magnetic Mountain*, p. 174.
- ²⁷ Rassweiler, *Generation of Power*, p. 105.
- ²⁸ Hiroaki Kuromiya, *Stalin's Industrial Revolution* (Cambridge, 1988), p. 294.
- ²⁹ Anatole Kopp, *Constructivist Architecture in the USSR* (New York, 1985), p. 71.
- ³⁰ For a more detailed discussion see Greg Castillo, "Gorki Street and the Design of the Stalin Revolution," in Zeynep Çelik, Diane Favro, and Richard Ingersoll, eds., *Streets: Critical Perspectives on Public Space* (Berkeley and Los Angeles, 1994), pp. 57-70.
- ³¹ Stites, *Revolutionary Dreams*, pp. 110-12.
- ³² A. L. Pasternak, *SA*, 4/5, 1927; cited in Kopp, *Constructivist Architecture*, p. 62.
- ³³ It is interesting to note that one of the few competition entries that elected to retain most of the monastery's structures was that by Georgii Golts, famed as a Socialist Realist.
- ³⁴ Kotkin, *Magnetic Mountain*, p. 103.
- ³⁵ Selim Khan-Magomedov, *Aleksandr Vesnin and Russian Constructivism* (New York, 1986), p. 189.
- ³⁶ Ivan Leonidov, English translation in Andrei Gozak and Andrei Leonidov, *Ivan Leonidov* (New York, 1988), pp. 115-16.
- ³⁷ Histories of Soviet modern architecture usually refer to such buildings as "sanatoria," a term that defers to the Stalinist linguistic and propagandistic precedents.
- ³⁸ Sheila Fitzpatrick, "The Great Departure: Rural-Urban Migration in the Soviet Union, 1929-33," in Rosenberg and Siegelbaum, *Soviet Industrialization*, p. 24.