

ALEXEI GASTEV AND THE SOVIET CONTROVERSY
OVER TAYLORISM, 1918-24

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SOVIET attitudes to work are as important for an understanding of Soviet culture as is, for example, the controversy over the so-called Protestant work ethic for an understanding of modern Western culture.¹ While the Soviet Union may not yet have found its Max Weber or its R. H. Tawney to argue over the origins of Soviet attitudes to work, when it does a figure of critical importance for an understanding of this aspect of Soviet culture will be Alexei Gastev. Gastev was the founder of the Central Labour Institute and a major figure in the development and popularization of Soviet ideas concerning 'scientific management', or, as that term is rendered into Russian, *nauchnaya organizatsiya truda* (scientific organization of work), usually abbreviated as NOT.

Gastev was originally known as the most popular of the 'worker-poets' in the early Soviet years—the 'Ovid of engineers, miners, and metal workers'.² His prose-poems celebrated the life of a new, industrial Russia, and caught the imagination of a generation of Soviet young people, who bought six editions of his *Poeziya rabochego udara* in the first years of Soviet rule and flocked to hear dramatic readings of his work in the studios of the Proletarian Culture movement.³ These poems were written in prison and Siberian exile before 1914, when Gastev was unable to continue his trade union and revolutionary activity. While these poems are far from the level of a Mayakovsky, their use of the strong imagery and language of the Petrograd working class won Mayakovsky's praise, and the Futurists excepted Gastev from their

¹ For the latter, see Max Weber, *The Protestant Ethic and the Spirit of Capitalism* (New York, 1958), and R. H. Tawney, *Religion and the Rise of Capitalism* (London, 1960). For a comparative study of attitudes to work, see Reinhard Bendix, *Work and Authority in Industry: Ideologies of Management in the Course of Industrialization* (New York, 1963).

² So described in the poem 'Gastev' by Nikolai Aseev. (See his *Sobranie sochinenii v 4 tomakh*, (M., 1930), vol. 1, p. 202.)

³ For an account of one such reading see *Krasnaya gazeta* (Petrograd), 23 February 1918. *Poeziya rabochego udara* was published in Petrograd early in 1918. It was reprinted in 1964 under the same title in Moscow, from the text of the sixth edition (M., 1925), together with several of Gastev's later publicistic works, and two evaluations of his poetry and career by recent Soviet scholars. It also appeared in Polish, German, and Latvian translations after 1919.

derision of the 'worker-poets'.⁴ The daily chorus of factory whistles, the hum of steel lathes, and glow of blast furnaces were the elements of Gastev's poetry. In his romantic vision of industrialism, men and machines merged: machines were seen as extensions of the human body while people took on the speed and efficiency of their creations, acquiring 'nerves of steel' and 'muscles like iron rails'. When asked why he abandoned poetry, Gastev wrote that he had turned to it only when other avenues of expression were cut off; when the 'revolution broke out [it] presented an opportunity to work directly as an organizer and creator of something new'.⁵

Gastev's last artistic creation, as he liked to view it, was the Central Labour Institute, formed originally in 1920 under the All-Russian Central Council of Trade Unions. He saw the Institute as the culmination of all his earlier romantic visions of the machine age. Notwithstanding its many practical endeavours as consultant to Soviet industry and educator in the industrial arts, the Institute bore the stamp of the poet's earlier romanticism; and the ideology which Gastev developed around it had something of the vagueness and ambiguity of poetry. Gastev's aim was nothing less than the transformation of Russian culture, but his ideas owed as much to American industrial engineers and capitalists, such as Frederick W. Taylor, Frank Gilbreth and Henry Ford as it did to Marx and Engels. Not surprisingly, the Institute was the centre of intense controversy during its early years, a controversy which was finally settled by the intervention of leading party members in 1924, and one from which Gastev emerged for a time victorious.

Only since 1962 has Gastev's role in Soviet industrialization begun to receive the attention it deserves in the Soviet Union. Besides being Director of the Central Labour Institute, which was charged among other duties with coordinating all Soviet research efforts on labour rationalization, Gastev edited several major industrial journals, held various government offices, and devoted the remainder of his life to improving industrial productivity, only to be swept away by the purges in 1938 (the date of his death is variously given as 1939 and 1941; the place and circumstances, if known, have not been revealed). The Institute which he founded also disappeared in the purges, and no similar institution was re-established in the Soviet Union until 1955, when the Scientific-Research Institute of Labour was created under the auspices of the new State Committee on Problems of Labour and

⁴ 'Introduction' to the fifth edition (1924), republished in *Poeziya* . . . (1964), p. 26. For early reviews of this book, see F. Kalinin, 'Put' proletarskoi kritiki', and '“Poeziya rabocheho udara” A. Gasteva', in *Proletarskaya kul'tura*, 1918, no. 4; V. Friche, 'Poeziya zheleznoi rasy', in *Vestnik zhizni*, 1918, no. 2, and 'Torzhestvuyushchaya pesn' kovannogo metalla', in *Tvorchestvo*, 1918, no. 2. See also Valery Bryusov, 'Vchera, segodnya i zavtra russkoi poezii', in *Pechat' i revolyutsiya*, 1922, no. 7.

⁵ *Poeziya* . . . (1964), p. 29.

Wages. The work of the former Central Labour Institute was mentioned in the publications of its successor institution;⁶ but Gastev's enormously productive career as its founder and director for 18 years remained in the shadows until 1962, when he was formally rehabilitated in a *Pravda* article by A. I. Berg, the leading Soviet cybernetician.⁷ The excitement and enthusiasm for employing 'science' to reform society during the twenties, and Lenin's recorded support for Gastev's Institute, provides a very useful precedent from early Soviet history for the present surge of optimism over cybernetics and Western techniques of industrial management.⁸ It seems pertinent, therefore, to attempt an evaluation of Gastev's career and the nature of his industrial thought.

Although Gastev's family background was that of an *intelligent*—his father was a provincial school teacher and Alexei had attended the Moscow Teachers' Institute before being expelled in 1902 for revolutionary activity—he had become a genuine 'worker' in the metal trades and lived for the most part from his earnings there. It was with this background that he became fascinated by the innovations of the American proponents of scientific management, F. W. Taylor and Frank Gilbreth; and developments in labour rationalization, especially time-and-motion studies, became his *idée fixe*.⁹

⁶ See, for example, the volume *Voprosy truda v SSSR* (M., 1958), a collection of historical essays on various labour problems in the USSR which mentions the work of the Central Labour Institute before 1938 but never mentions the name of its director. According to the article 'Nauchnaya organizatsiya truda', in the new *Ekonomicheskaya entsiklopediya* (M., 1964), vol. 2, pp. 27-31, the State Committee on Problems of Wages and Labour issued a decree on 4 November 1957, declaring that the experience and methods of the former Central Labour Institute should be used in current efforts at scientific management and professional instruction of workers. Gastev, however, was not mentioned by name.

⁷ A. I. Berg, 'Lenin i nauchnaya organizatsiya truda', *Pravda*, 24 October 1962. This article is mentioned by S. Lesnevsky in the 'Afterword' to the 1964 edition of *Poeziya rabochego udara* (p. 305). Although Gastev was rehabilitated as a poet in 1958 when a selection of his work was published in the anthology *Proletarskie poety pervykh let sovetskoi epokhi* (M.), the significance of his role in Soviet industrialization was not formally recognized until the appearance of Berg's article. A collection of Gastev's works appeared in 1966, and a flood of articles and books which give prominent attention to his role as industrializer began to appear in 1965. Below is a list of those that have been announced or are already in print: scattered references in the journal of the Scientific-Research Institute of Labour, *Sotsialisticheskii trud*, 1965, no. 9, pp. 31, 38-39; V. D. Banasyukevich, 'V. I. Lenin i nauchnaya organizatsiya truda', *Istoriya SSSR*, 1965, no. 2, pp. 108f; N. V. Kuznetsov, K. E. Kuznetsova, and P. F. Petrochenko, 'Osushchestvlenie leninskikh idei nauchnoi organizatsii truda', *Voprosy istorii KPSS*, 1965, no. 8, p. 3ff; *Nauchnaya organizatsiya truda: materialy vtoroi vsesoyuznoi konferentsii po nauchnoi organizatsii truda (mart, 1924)* (M., 1965); *Nauchnaya organizatsiya truda dvadtsatykh godov: sbornik dokumentov i materialov* (Kazan, 1965); *Nauchnaya organizatsiya truda v promyshlennosti: bibliografiya 1925-1964 gg.* (Novosibirsk, 1965); A. Shcherban (ed.), *Nauchnaya organizatsiya truda* (Kiev, 1965).

⁸ In the words of A. I. Berg: 'The attempt to apply the latest achievements of economic theory, mathematics, electronics, and cybernetics to the management of the national economy is the realization of V. I. Lenin's directives concerning scientific management. . . . Modern cybernetics—the theory of the goal-directed management of complex processes—can be viewed in the USSR as the heir and successor of scientific management' (*Pravda*, 24 October 1962).

⁹ *Vsesoyuznoe obshchestvo politicheskikh katorzhan i ssyl'no-poselentsev, Deyateli*

It was on the basis of scientific management and the work he was engaged in after 1918 as a leading Soviet trade union official that Gastev formed his idea of the new culture. The Soviet decree on workers' control of industry plunged the trade unions into the problems of industrial management, and had the ironic outcome of transforming such skilled workers as Gastev into industrial managers. The metal workers' union was the first Russian union to call for the adoption of progressive piece rates—an integral feature of the Taylor system—in place of a uniform system of wages for all workers; and Lenin, faced with the necessity of increased production, abandoned his earlier hostility to Taylorism, and decided to adopt what was found useful in scientific management.¹⁰ According to Mikhail Tomskey, the leading Soviet trade unionist of this period, Gastev—as secretary of the metal workers in 1917–18—played a key role in persuading his fellow unionists of the need for progressive piece-rates as a spur to production.¹¹ It then became the task of the unions to define groups of workers according to their value and skills and establish a system of monetary incentives. Gastev, engaged in this task during 1918 and 1919, eventually brought forth his own conception of the new culture. His views were first published in *Proletarskaya kul'tura*, the official organ of the Proletcult.¹²

Gastev began by criticizing the 'bookishness' and confident generalities with which proletarian culture had thus far been discussed. So

revolyutsionnogo dvizheniya v Rossii (M., 1934), vol. 5, p. 1162.

¹⁰ For Lenin's unfavourable views of the Taylor System see his '“Nauchnaya” sistema vyzhimaniya pota', *Pravda*, no. 60, 13 March 1913 (reprinted in V. I. Lenin, *Polnoe sobranie sochinenii* (M., 1961), vol. 23, pp. 18–19); and 'Sistema Teilora—poraboshchenie cheloveka mashinoi', in *Put' Pravdy*, no. 35, 13 March 1914 (reprinted in Lenin, *op.cit.*, vol. 24, pp. 369–71). Lenin published his revised view of Taylorism in 'Ocherednye zadachi Svcetskoii vlasti' (1918). See Lenin, *Sochineniya* (4th edn.), vol. 29, pp. 229–30. During a plenary session of the Supreme Council of the National Economy (VSNKh) on 1 April 1918, Lenin made the following remarks with regard to a proposed decree on labour discipline: 'In the decree, we must definitely speak of the introduction of the Taylor System, in other words, of using all scientific methods of labour which this system advances. Without this, it will be impossible to raise productivity, and without that we will not usher in socialism' (quoted in Banasyukovich, *op.cit.*, p. 108). It is one of the curiosities of history that Taylorism, with its promises of class harmony, appealed not only to the leaders of bourgeois Europe after World War I, as Charles S. Maier has recently argued, but also to the leader of the most revolutionary regime of that period. (See Maier's article 'Between Taylorism and Technocracy: European Ideologies and the Vision of Industrial Productivity in the 1920s', *Journal of Contemporary History*, no. 5, 1970, pp. 27–61.)

¹¹ See *Organizatsiya truda*, 1924, no. 2–3 (March–April), p. 67ff.

¹² A. Gastev, 'O tendentsiyakh proletarskoi kul'tury', *Proletarskaya kul'tura*, 1919, no. 9–10, pp. 35–45. It is difficult to say how widely read this journal was. Although 15 different periodicals were issued at various times by local Proletcults, it was the only central Proletcult organ. Its circulation is unknown, but in 1920 the Proletcult movement as a whole claimed 400,000 members and 80,000 active in its artistic studios. Ten million copies of its publications were in circulation. (Gorburon, *Voprosy istorii KPSS*, 1958, no. 1, p. 32ff; see also Jack Grossman, 'Alexander Bogdanov and the Ideology of Proletarian Culture'—Master's essay, Slavic Languages and Literatures, Columbia University, 1965. Grossman concentrates on the literary aspects of the Proletcult and Bogdanov's activity.)

far as he was concerned, it was still not possible to say in detail what the future culture of the industrial worker would be like, but he believed the outlines could be discerned by those who were deeply involved in modern industry. In his view, to understand the new culture of the proletariat 'it is necessary to be a kind of engineer; it is necessary to be an experienced social constructor and to take one's scientific methods not from general presuppositions regarding the development of productive forces, but from a most exact molecular analysis of the new production, which has brought into existence the contemporary proletariat. . . .'¹³

Gastev believed that a new kind of industry had come into being and had gathered force especially during the war. 'The metallurgy of this new world, the motor car and aeroplane factories of America, and finally the arms industry of the whole world—here are the new, gigantic laboratories where the psychology of the proletariat is being created, where the culture of the proletariat is being manufactured. And whether we live in the age of super-imperialism or of world socialism, the structure of the new industry will, in essence, be one and the same.'¹⁴

Gastev divided all industrial workers into five types, according to the varying degree of skill and creativity required by their jobs. For example, in the machine-building industry, the most skilled were those machinists and lathe operators who in the process of assembling a machine made changes and added their own creative touches. A second type were those machine workers who, while adding nothing creative to the assembly process, possessed a variety of skills and often had a choice of more than one method in solving a work problem. These highly skilled workers included fitters (*ustanovshchiki*) and tuners (*nastroishchiki*), among others. The third type were those whose work was completely standardized and devoid of any subjective element. The individual worker simply followed a set routine, for instance, operating a metal-stamping or cutting machine.

The fourth type were those who had only recently entered industry and were learning elementary machine work through mass instruction. The last type, almost extinct, were those who did heavy physical, unmechanized tasks. Gastev believed that workers in every production process could be classified into similar types. So far as the future of machine production was concerned, he saw the third type rapidly replacing all the others. Mechanization and standardization were proceeding in such a way as virtually to eliminate heavy physical and unskilled labour at the bottom of the scale as well as the creative and subjective elements at the top. So it was to the third type that he turned for a characterization of 'proletarian psychology' and the new culture

¹³ Gastev, 'O tendentsiyakh proletarskoi kul'tury', p. 36.

¹⁴ *Ibid.*

of the proletariat. He asserted that the workers themselves would become increasingly mechanized and standardized, like cogs in a vast machine, a view which was to be denounced as nonsense by some and was to arouse considerable controversy in Soviet society. 'This feature', he wrote, 'will impart to proletarian psychology a striking anonymity, permitting the classification of an individual proletarian unit as A, B, C, or 325, 0·075, 0, and so on.'¹⁵ Even words and ideas would come to have precise, technical meanings, devoid of nuance and emotional connotations, and could be plugged in and unplugged as needed. 'Before us there is the prospect not only of an individual mechanized worker but of a mechanized system of labour management. Not a person, not an authority, but a "type"—a group—will manage other "types" or groups. Or even a machine, in the literal sense of the word, will manage living people. *Machines from being managed will become managers*.'¹⁶ The pace of production was gradually being normalized until the whole world would work 'at the same tempo'. This technical process of growing uniformity would permeate every aspect of the worker's existence: 'even his intimate life, including his aesthetic, intellectual and sexual values.'¹⁷

While Gastev emphasized that all these conclusions were tentative, he felt that certain features of the future proletarian culture were already visible. 'The methodical, constantly growing precision of work, educating the muscles and nerves of the proletariat, imparts to proletarian psychology a special alertness, full of distrust for every kind of human feeling, trusting only the instrument, the apparatus, the machine.'¹⁸

The new industry would be characterized by a form of collectivism unlike anything yet seen:

The psychology of the proletariat is already now being transformed into a new social psychology where one human complex works under the control of another. . . . This psychology reveals a new working-class collectivism which is manifested not only in relations between persons but in the relations of whole groups of people with whole groups of mechanisms. Such a collectivism can be called *mechanized collectivism*. The manifestations of this mechanized collectivism are so foreign to personality, so anonymous, that the movement of these collective complexes is similar to the movement of things, in which there is no longer any individual face but only regular, uniform steps and faces devoid of expression, of a soul, of lyricism, of emotion, measured not by a shout or a smile but by a pressure gauge or a speed gauge.¹⁹

¹⁵ *Ibid.*, p. 44. ¹⁶ *Ibid.*, p. 43 ¹⁷ *Ibid.* ¹⁸ *Ibid.*, p. 44. ¹⁹ *Ibid.*, pp. 44–45.

Though this writer has found no direct evidence to support the contention, it seems reasonable that lines such as these may have inspired Evgeny Zamyatin's *My* (We), written in 1920 with a setting which fits Gastev's vision of the future very well. *My* was the prototype of a certain genre, the anti-utopian novel, whose better-known successors were Huxley's *Brave New World* and Orwell's *Animal Farm* and *1984*.

Gastev's vision of the future, which he later revised to allow for greater individual creativity, was scarcely to the taste of A. A. Bogdanov, one of the founders of the Proletarian Culture movement and an Old Bolshevik who had broken with Lenin after the 1905 revolution. Bogdanov, who was himself something of a reductionist and tended to view society in organic terms,²⁰ was none the less repelled by an attempt to reduce society to a vast machine and its members to unequal parts and stated his objections in the following issue of *Proletarskaya kul'tura*.²¹ According to Bogdanov, Gastev placed entirely too much weight on the industrial mobilization which took place during World War I, which Bogdanov did not consider typical of industrialization, nor a harbinger of the future. The vast majority of workers in the arms industry during the war may have been occupied in standardized, repetitive and uncreative machine work; but this was only one aspect of production, and such work was the type which could most easily be transferred in the future to machines. Thus basing his conclusions on the experience of a special situation, Gastev saw the proletariat of the future deprived of all creativity; and he had therefore concentrated all his attention on the standardized functions of industry to the neglect of what was more vital: the functions of planning and regulating. To deprive the proletariat of all creativity meant essentially the militarization of labour, and could only lead to some terrible form of barrack-like existence.

While Gastev's collectivism saw the proletariat reduced to a faceless crowd, Bogdanov continued, the tendency of proletarian culture was in quite the opposite direction. He agreed that work in industry would tend to become more and more of a single type, but industrialism was producing ever more workers of the highest type: the creative machinist

²⁰ Bogdanov, *O proletarskoi kul'ture* . . . , p. 315. Fedor Kalinin expressed a similar criticism of Gastev's article (see his 'Proletarskaya kul'tura i ee kritiki', *Proletarskaya kul'tura*, 1919, no. 9-10 (June-July), pp. 1-4). Mariya Fal'kner-Smit, a Soviet labour statistician and a follower of Bogdanov, also criticized Gastev for his attempt to generalize from data limited to the metal-working industry. She emphasized the importance of the mining, chemical, and electro-technical industries. (See her critique, 'Ob izuchenii trudovykh protsessov (Otvét A. Gastevu)', in *Proletarskaya kul'tura*, 1919, pp. 38-47.)

²¹ 'O tendentsiyakh proletarskoi kul'tury (Otvét A. Gastevu)', *Proletarskaya kul'tura*, 1919, no. 11-12. This article was republished in Bogdanov's anthology *O proletarskoi kul'ture 1904-1924* (M., 1925), and the page numbers in the footnotes which follow refer to the latter text.

who shares in the planning, regulating, and fulfilling functions of industry.²²

Bogdanov did not see industrialism turning the proletariat into a social automaton, but rather as leading it to a society of 'comradely cooperation':

The proletarian collective is distinguished and defined by a special organizational bond, known as *comradely cooperation*. This is a kind of cooperation in which the roles of organizing and fulfilling are not divided but are combined among the general mass of workers, so that there is no authority by force or unreasoning subordination but a common will which decides, and a participation of each in the fulfilment of the common task. Where work demands the direct supervision of an individual person, there will emerge, instead of authority and force, a comradely recognition of competence; and he who in one endeavour was the instructor may then in another follow the directions of a comrade whom he had just been supervising: the organizer and executor change places frequently.²³

Only under this form of collectivism, according to Bogdanov, would the individual be able fully to realize his individuality. Instead of reducing the most skilled and creative workers in industry to the level of the present average worker—Gastev's third type—the average would be raised to new levels of creativity and skill. Bogdanov strongly suspected that lurking behind Gastev's description of proletarian culture was an élite of engineers, standing above the proletariat and controlling it completely.²⁴

Bogdanov was not far from the mark when he accused Gastev of fostering a new élite of engineers. Before Gastev took up the cause of Taylorism, it had been promoted by Russian engineers in the pages of their major professional journal; and the engineers remained among its major promoters after the revolution.²⁵ In 1919 Gastev organized a school of 'social engineering' in the Ukraine; and in 1920 he created its successor, the Institute of Labour under the All-Russian Central Council of Trade Unions. The latter soon evolved into the Central Labour Institute, with Gastev as Director; and here he was able to

²² Bogdanov, *O proletarskoi kul'ture* . . . , p. 324. For earlier detailed discussions of industrialism and the direction of proletarian culture, see A. A. Bogdanov, *Kul'turnye zadachi nashego vremeni* (M., 1914); and *Elementy proletarskoi kul'tury* (M., 1920). In a pamphlet published in 1913, Bogdanov, like Lenin at the same period, expressed an unfavourable view of Taylorism, with the prophetic reservation that its only possible progressive application might be in an underdeveloped economy with a plentiful supply of unskilled labour (*Mezhdu chelovekom i mashinoi*, St. Petersburg, 1913).

²³ Bogdanov, *O proletarskoi kul'ture* . . . , p. 324.

²⁴ *Ibid.*, p. 326.

²⁵ See *Vestnik inzhenerov*, October 1915, pp. 933-6; no. 2, 1916, pp. 553-64, 575-80, 585-95; June-July 1917, pp. 265-72, 288-92, 302-8; January-February 1924, pp. 3-4; I. Rabchinsky, *O sisteme Teilora* (M., 1921).

develop and test the methods of social engineering to which he was giving shape.

In short, the difference between the views of Gastev and Bogdanov can be summed up as follows: Gastev believed that rationality at the current stage of industrialism demanded a further division of labour in the economy, with increased specialization and a consequent inequality; Bogdanov believed that specialization and, with it, inequality, could be largely overcome by a rapid raising of the cultural level of the masses.

In 1919 Gastev's critics did not make Taylorism the central issue of their attacks; and it was perhaps not yet clear how great the Taylor System was an influence in his views. After 1920, however, Gastev made explicit the extent to which he was in the tradition of scientific management; and the controversy which surrounded his views in the early twenties centred on Taylorism and its applicability to Soviet industry.

Gastev was a figure not unlike Frederick W. Taylor, both in background and mental approach. Taylor had been a skilled worker before he rose to the status of an engineer and industrial manager, a fact which the Central Labour Institute readily seized upon in its treatment of Taylor's views.²⁶ He had first risen to prominence in the 1890s as a leader of the reform movement in shop management, centred in the American Society of Mechanical Engineers.²⁷ The starting point of his system was a new method for time studies, in which a particular 'job' was divided into various operations and each operation was then timed by a stop watch. In the process, operations not considered essential to the job were eliminated as 'waste' or turned over to a specialist (for example, sharpening a tool was to be done by a specialist and not by the man who used the tool). Several readings were taken for each operation from a stop watch; the average times were added and a certain allowance made for error; the total was then considered the 'normal' time required for a particular job. In order to achieve the increase of productivity made possible by his methods, Taylor advocated the adoption of differential piece-rates, which he hoped would both spur employees to work at the pace of which machines were capable and secure to the firm a greater profit. (According to a system of differential

²⁶ See the highly favourable treatments of Taylorism by M. V. Piolunkovsky, 'O sisteme Teilora', *Organizatsiya truda*, 1921, no. 1 (March), pp. 26-30, and S. F. Glebov, 'F. Teilor i ego raboty', *ibid.*, 1922, no. 3, pp. 5-31.

²⁷ The discussion of Taylor's views which follows is drawn from the following sources: Hugh G. J. Aitken, *Taylorism at Watertown Arsenal: Scientific Management in Action 1908-1915* (Cambridge, Mass., 1960), pp. 4-48; Georges Friedmann, *Industrial Society: The Emergence of the Human Problems of Automation* (New York, 1964), pp. 37-67; Reinhard Bendix, *op.cit.*, pp. 274-81. Taylor set forth his basic views in *Shop Management* (New York, 1911) and *The Principles of Scientific Management* (New York, 1911).

piece-rates, a certain norm of production is determined by time study, and a worker who produces the norm is paid at an established rate per piece. A worker who exceeds the norm receives a premium, while slow workers are penalized by a lower rate per piece.)

While Taylor was properly the father of scientific management, his contemporaries Frank and Lillian Gilbreth extended his methods through time-and-motion studies. Where Taylor had studied a particular job on the basis of just one worker, choosing a 'good, fast man' or an 'average, steady man' and then dividing the job into separate operations (eliminating the 'unessential') and timing them, the Gilbreths took his analysis a step further and by means of photography and models sought to study individual labour motions among a series of workers doing the same job and then to determine which motions were more efficient and which could be improved or eliminated.

Both Taylor and the Gilbreths shared the view that there was 'one best way' of doing every job and that this should be determined by someone other than the worker: an outside 'expert'. Such was the core of scientific management; and it was an assumption shared by Gastev as he developed his social engineering into an ambitious system of management, with Taylorism at its base. The centre of this 'applied science of labour' was to be the Central Labour Institute, so called after the Institute of Labour was merged at Lenin's decree, on 24 August 1921, with a similar institution in the Commissariat of Labour. Gastev remained the Director, and his Institute was empowered to co-ordinate all Soviet research efforts at labour rationalization in more than a dozen institutes throughout the country. The Central Labour Institute remained officially under the Trade Unions Council, but in its dealings with the government it was responsible to Gosplan and the Council on Labour and Defence (STO).²⁸

As early as June 1921 Gastev sought financial support from Lenin, since the funds of the trade unions were inadequate for his purposes. Lenin, towards the end of his life, was apparently planning to write a book on scientific management; and, if we can believe Gastev's own account of his interview with the Soviet leader, Lenin was enthusiastic about the Institute's endeavours in this field. His enthusiasm was no doubt genuine, for in answer to Gastev's request for five million gold rubles Lenin sent a note to the Commissar of Finance urging that funds be found for such a vital institute, despite the financial hardship of the Soviet state.²⁹

²⁸ *Organizatsiya truda*, 1922, no. 3, p. 163; Lenin, *Polnoe sobranie sochiineni*, vol. 45, pp. 206, 366, 395.

²⁹ Gastev's account was published in *Organizatsiya truda*, 1924, no. 1 (March), pp. 11-13. It was no doubt part of his campaign to prove the legitimacy of his claims for the Central Labour Institute against the attacks of its critics. For Lenin's note to

By the end of 1921 Gastev was able to publish a journal, *Organizatsiya truda*, in which he set forth in more detail his ambitions for the Institute. By 1922 a series of crudely equipped laboratories was functioning in the headquarters building of the Institute in Moscow, where a bookstore, a museum of technology, and a library of 10,000 volumes in Russian and other languages were also located.³⁰

Gastev published a long programmatic editorial in the first issue of his journal.³¹ He began with cautious praise for the role unions had often played in rationalizing labour processes, citing their help in raising the standards and qualifications of workers. He felt, however, that the 'mood of panic' and the almost universal opposition to time study on the part of the unions was an unfortunate exception. 'In 1912 and 1913, a practical application of the scientific system began in several St. Petersburg factories. It is necessary to note that Petersburg had already learned from the scandalous behaviour in the West, and approached the matter a good deal more calmly, concentrating on the purely technical side. But, all the same, the mass of workers and the labour organizations were very negatively inclined towards the system.'³²

While the opposition to time study continued, in Gastev's opinion the war years helped to accustom Russian workers to a rapid pace; and in 1917 'serious agitation for production norms' had begun among the metal workers. 'Taylor's name was spoken openly. But the union masses and a significant part of the union leaders remained deaf to this agitation for production.'³³ Even after the adoption of differential piece-rates in 1918, Gastev felt that the unions by and large were conditioned more by the consumer demands of their members than by the need for greater productivity. If the unions did not concentrate more on the problems of raising labour productivity, Gastev warned, the state managerial organs would step in. Without embarrassment, he wrote: 'Among the masses two demons will always struggle—the consumer and the producer. We are definitely on the side of the second. And our task is to infect these masses by every possible proof with an unquenchable passion for effort, labour, energy.'³⁴

Alongside Taylorism, and often in opposition to it, there had grown up a number of specialized studies concerned first of all with the welfare of the individual worker, and only secondarily with an increase in productivity. Studies of work physiology, labour fatigue, the selection of workers for different tasks—in short, all the research which could be classified under the headings of industrial psychology or the protection

Al'sky see Banasyukevich, *Istoriya SSSR*, 1965, no. 2, p. 110.

³⁰ *Organizatsiya truda*, 1922, no. 3, p. 167ff. The Chairman of the Institute's Scientific Council in these early years was S. G. Strumilin.

³¹ 'Nashi zadachi', *ibid.*, 1921, no. 1 (March), pp. 7-17.

³² *Ibid.*, p. 8.

³³ *Ibid.*, p. 9.

³⁴ *Ibid.*, p. 16.

of labour—Gastev was eager to present as part of his system and not necessarily in conflict with it. However, his technicist assumptions still got the better of his sensitivity for the psychology and welfare of the individual worker:

The world of the machine, the world of the mechanism, the world of industrial urbanism is creating its own collective bonds, is giving birth to its own types of people, whom we must accept just as we accepted the machine, and not beat our heads against the gears. We must introduce some corrective factors into its yoke of iron discipline; but history urgently demands of us to pose, not these small problems of the protection of personality by society, but rather a bold design of human psychology in reliance upon such an historical factor as machine production.³⁵

Two of Gastev's most widely published pamphlets were *Kak nado rabotat'* and *Kak izobretat'*.³⁶ In a prologue to the first, he wrote: 'We would like to introduce, to the extent of our influence, a culture of work as such, independent of its pleasantness; beyond that, we would like to show that united with this culture is a certain severity, a postponement of immediate satisfaction which may be called conditioning (*trenirovka*) for work.'³⁷

In the pamphlets *Kak izobretat'*, *Yunost'*, *idi*, and *Vosstanie kul'tury*,³⁸ Gastev set forth in more detail the qualities he felt were required in Soviet culture as a whole. Inventiveness was needed in the sense that 'Taylor was an inventor, Gilbreth was an inventor, Ford was an inventor'.³⁹ Russia was known for both its laziness and its impulsive energy; and these were characteristics which would have to be overcome or harnessed in a new culture. Strict practicality, infinite steadiness and patience, the power of observation, ability to analyse and measure in time and space, enormous powers of memory and, finally, creative imagination linked with the will to transform thought into action—these were the qualities required for successful invention. Russia already had too many philosophers and psychologists; the kind of imagination needed was not that which dreamt of a land flowing with milk and

³⁵ *Ibid.*, p. 14.

³⁶ Numerous editions of *Kak nado rabotat'* were published in Moscow, Odessa, Perm, Arkhangelsk, between 1922 and 1924; first published in *Organizatsiya truda*, 1921, no. 1, pp. 18–19; quotations are from the latter. *Kak izobretat'* was published together with the above pamphlet in 1924 and 1927; republished in the 1964 edition of *Poeziya rabochego udara*. References here are to the text as published in the 1964 edition.

³⁷ *Poeziya rabochego udara*, p. 18.

³⁸ *Yunost'*, *idi* (M., 1923); *Vosstanie kul'tury* (Kharkov, 1923). The latter was first published in a series of articles in *Pravda* (no. 122, 3 June 1922, no. 128, 11 June 1922, no. 1, 3 January 1923). Other books and pamphlets by Gastev in this period, a text of which this writer has not been able to obtain, were *Trudovye ustanovki*, *Metodika obucheniya* (M., 1924) and *Novaya kul'turnaya ustanovka* (M., 1924).

³⁹ From *Kak izobretat'* (in *Poeziya . . .*, 1964, p. 273).

honey but of what was practical and realizable in the present. What Russia needed to rebuild was

. . . first of all skill, the ability to work over, adapt, match one thing to another, to condense, to equip, the ability to construct, to masterfully collect the scattered and disordered into mechanisms, active things.⁴⁰

The old intelligentsia had to be shaken out of their Oblomov-like lethargy and their scepticism, or better yet, replaced by a new kind of man, 'self-colonizers' who, rather than dream about the latest machines and a helping hand from abroad, turn themselves into human machines and colonize their own country. Gastev looked especially to the youth for these qualities, for he was beginning to despair of the intelligentsia, who to every problem answered with an entire philosophy but found no way to solve it.⁴¹ Even the skills of the most illiterate American were more valuable under Russia's present condition than those of a sceptical intellectual. In fact, Gastev advocated nothing less than 'Soviet Americanism', wanting to see Russia transformed into a 'new, flowering America'.⁴²

To mass education, Gastev recommended the addition of mass vocational training of a general nature which would prepare young people for a variety of occupations in the economy. Everyone should have a labour obligation, 'analogous to a military obligation'. Just as in an army there are bemedalled heroes,

Is it so absurd in our revolutionary country to put forward the idea of a

labour championship

by which a finely performed labour operation will be honoured with a decoration before a thousand eyes of professionally experienced workers? Through such a championship there can be the greatest discoveries of a physiological, technological and organizational character.⁴³

Such, in broad outline, were the proposals Gastev made for Soviet culture in 1923. By and large, his thinking was very much in tune with that of the Soviet leadership. As the outcome of the controversy over his views and activities in 1923 and 1924 was to prove, Gastev had the respect and attention of the highest party circles, though he himself did not become a member of the Communist Party until 1931.⁴⁴

His lack of party membership was used against him by 'The Moscow

⁴⁰ From *Yunost', idi* (as published in *Poeziya* . . . , 1964), p. 206.

⁴¹ *Vosstanie kul'tury* (in *Poeziya* . . . , 1964, p. 236).

⁴³ *Ibid.*, pp. 265-6.

⁴² *Ibid.*, p. 245.
⁴⁴ *Deyateli* . . . (see footnote 9 above), p. 1161.

Group of Communists Actively Interested in Scientific Management'. This group soon became centred in the Council on Scientific Management (*Sovnot*) of the Commissariat of Workers' and Peasants' Inspection (*Rabkrin*), which was charged by the XII Party Congress with rationalizing the government bureaucracy. They challenged the claims to pre-eminence and competence of the Central Labour Institute. A campaign against Gastev and his Institute began in the Soviet press and drew dissidents from within the Institute itself, as well as from other institutions which disagreed with Gastev's approach. The opening shot was fired in January 1923, when a conference of the above Group was held in Moscow. It passed resolutions objecting to a study of the human labour involved in metal cutting and trimming by hand (*rubka zubilom i opilovka*), a study to which the Central Labour Institute had been devoted since its founding. They called rather for the creation of a general system of rational labour based on the most modern technology. They also criticized the insufficient attention being given to the psychological and physiological sides of labour, and the subordination of the individual worker's interests 'to the interests of the fetish of production' which had the 'aim of transforming the living person into an unreasoning and stupid instrument without any general qualifications or sufficient all-round development'.⁴⁵

The campaign grew stronger throughout 1923 and drew support from other elements. Another dissident, the Director of the Kazan Institute of Labour, I. V. Burdyansky, joined the group and circulated a pamphlet against Gastev among top party leaders during March 1924;⁴⁶ in June another of the critical communists, Ya. Shatunovsky, fired a heavy barrage at Gastev in a literary journal widely read by the intelligentsia.⁴⁷ Shatunovsky made much of Gastev's anti-intellectualism and considered him a petty bourgeois who occupied his high position only by some kind of oversight. Gastev's pamphlet *Vosstanie kul'tury* was a slander on Soviet accomplishments in the critic's opinion, asserting as it did that the revolution had left in Russia nothing but 'junk' (*rukhl'yad*). Gastev's emphasis on the primitive, and his call for Robinson Crusoes was ludicrous in the extreme, and ignored the modern industry which Russia already possessed and the modern technology which it was developing. Russia had only to trade its harvests for the latest in machinery.⁴⁸ Gastev was presumptuous in equating the importance of his

⁴⁵ *Pravda*, 11 January 1923.

⁴⁶ See *Kommunisticheskii put'*, 1923, no. 2.

⁴⁷ Ya. Shatunovsky, 'Nauchnaya organizatsiya truda i ee anarkhistskoe vyyavlenie', *Krasnaya nov'*, 1923, no. 6, pp. 53-64. Another reaction to Gastev's views of 1923 was that of Lunacharsky, Commissar of Education, who by and large approved, but feared that the emphasis on 'American business sense' might eventually detract from revolutionary goals. (See A. V. Lunacharsky, 'Novyi russkii chelovek', in *Idealizm i materializm* (M., 1924), pp. 146-51.)

⁴⁸ *Ibid.*, p. 254.

Institute to that of Gosplan and its work towards the electrification of the country. Gastev was insensitive to write about the protection of labour that 'here there are as many mistakes as there are in societies for the prevention of cruelty to animals by philanthropic old ladies'.⁴⁹ This, in the critic's opinion, was carrying Taylorism to an absurdity: 'Is it really necessary to speak about the meaning of the protection of labour in a proletarian country? Is it possible that a person even slightly literate in questions of the scientific organization of labour does not know that the basic condition for productivity is a well-lighted, clean, spacious, well-ventilated work room?'⁵⁰

Beyond personalities and the rivalries of institutions, at the heart of this exchange was a dispute over what should be the proper Soviet attitude to work and the direction that scientific management should take for the immediate future in the Soviet economy. Gastev was more narrowly technicist and in the Taylorist tradition; his critics emphasized the need to modify Taylorism with industrial psychology and greater effort aimed at the protection of the individual worker. It was for the purpose of resolving this dispute that the Second All-Union Conference on Scientific Management was called for March 1924.⁵¹

Gastev was not long in coming to his own defence; several months before the Conference, he began a counter-barrage, well-larded with testimonials in his favour. Early in 1924⁵² he replied to the Shatunovsky article. He asserted that his critic, by attacking him, was also attacking such party leaders as Bukharin, the editor of *Pravda*, in which the work that was Shatunovsky's special target, *Vosstanie kul'tury*, had originally been published. Bukharin himself had expressed in recent speeches similar opinions on the necessity to create more efficient workers. Gastev cited Bukharin's words in a speech to Young Communists, made in October 1923: 'We must direct our efforts now, not to a verbose general science, but towards creating in the shortest possible time a definite number of qualified, especially disciplined, living labour machines readily available to be put into general circulation.'⁵³ Gastev quoted an earlier speech of Bukharin advocating such points, consonant with his own, as: 1) reform of human psychology; 2) merging of Marxist theory with American practicality and 'business know-how'; 3) ending the concentration on the humanities in education in favour of technical, practical knowledge; 4) substitution of specialization for universalism, and 5) conditioning of the will, mind, and body of man.⁵⁴

⁴⁹ *Vosstanie kul'tury* (Kharkov, 1923), p. 21, quoted in Shatunovsky, *op.cit.*, p. 259.

⁵⁰ *Ibid.*, p. 259.

⁵¹ An earlier conference had been held in January 1921. For an account of it see *Organizatsiya truda*, 1922, no. 3, pp. 156-62.

⁵² A. Gastev, 'Shatunovshchina kak metodika', *Krasnaya nov'*, January-February, 1924, pp. 230-8.

⁵³ Quoted by Gastev, *ibid.*, p. 236.

⁵⁴ *Pravda*, no. 229, 11 October 1922, quoted in Gastev, 'Shatunovshchina kak

Gastev concluded by citing an even clearer testimonial, that of Tomsky, head of the All-Union Council of Trade Unions:

It is necessary to continue with redoubled energy the effort already begun, to organize support and create an atmosphere of sympathy for the Central Labour Institute, whose work holds the utmost significance for the working class of the Soviet Republic. This is all the more necessary since several of our union organizations, seduced by the eloquence of a group of comrades also calling themselves 'activists of scientific management', are talking about the deviations of the Central Labour Institute, of the absence of questions concerning the protection of labour in its work, of a preoccupation with labour training, with handicraft methods of instruction versus modern machines, as if such methods were being defended—all of which undoubtedly introduces confusion and hinders the work which has been begun and the requirement of which is effort and peace.⁵⁵

Gastev's article was followed by a meeting of Petrograd trade unions, which after a report by him voted strong support for the Institute. Beyond this, a series of articles appeared in *Pravda* and *Izvestiya*, in which such luminaries as Zinoviev and Andreev, a secretary of the party's Central Committee, supported Gastev, joined a few days later by a leading Rabkrin functionary of the Workers' and Peasants' Inspectorate, Rozmirovich.⁵⁶

In February 1924 both parties to the dispute published platforms for the forthcoming conference. The Institute in its platform took as a text Lenin's statements of 1918 calling for the critical use of Taylorism.⁵⁷ The Institute position concluded that under the New Economic Policy scientific management should be used by individual firms to raise the quantity and quality of their production and earn greater profits for industrial expansion. Of course, under this form of state capitalism, the platform stressed, consideration should be given to the social and economic role of the individual factory in the overall system; but by and large the emphasis was not to be on large-scale planning but on improving performance at the local level. The firms most efficient in competition should be held up as examples to the rest of the economy.

To prevent worker dissatisfaction, the platform continued, scientific management should be tied to a real rise in wages and better working

metodika', p. 237.

⁵⁵ *Trud*, no. 106, 1923, quoted in Gastev, 'Shatunovshchina . . .', p. 237.

⁵⁶ Andreev in *Izvestiya*, no. 60, 1924; Zinoviev *ibid.*, 18 February 1924; Rozmirovich in *Pravda*, no. 42, 21 February 1924.

⁵⁷ *Trud*, 5, 6 February 1924. This platform was signed by Gastev, Gol'tsman, Kolesnikova, and Lavrent'ev.

conditions. What was useful in Taylorism should be approached on the basis of detailed laboratory studies of labour processes, beginning on a 'narrow base' by concentrating on certain fundamental labour operations. Unions should encourage interest in scientific management and occupy themselves especially with questions of wages. However, the management of individual firms would retain the ultimate authority; and outside organizations interested in scientific management would be subordinate to local management.

Finally, the platform of Gastev's group called for the re-organization of the Council on Scientific Management of Rabkrin (in which the opposition was largely centred) to include greater representation by institutes concerned with labour rationalization.

A few days later, the 'Group of Communists'—Gastev's critics—published their own platform in *Pravda*.⁵⁸ They had found a spokesman in Pavel Kerzhentsev, a communist journalist and former Proletcult leader, who had just written a popularized version of efficiency methods, entitled *Printsipy organizatsii*.⁵⁹ In July 1923 Kerzhentsev had organized the 'Time League', a labour efficiency movement which created 'cells' in individual firms and by 1924 claimed 20,000 members.⁶⁰ Gastev and his group viewed this movement with unconcealed suspicion and wanted it clearly subordinated to local management.

'The Group of Communists' particularly wanted more planning in the Soviet economy. They criticized the Central Labour Institute for its concept of 'the narrow base' which began by studying simple labour processes to the neglect of the more general aspects of production, and labour institutes in general for their pure experimentation and laboratory methods uncoordinated with the needs of the economy. The use of the stop watch as the sole means of determining work norms was an especially exploitative and uncritical application of Taylorism to Soviet industry. The most important problem of Soviet industry was to raise productivity without increased intensification of labour, and to raise wages in proportion to increased productivity.

On the plant level, 'The Group of Communists' called for closer cooperation between local managers and their trade union counterparts, and wanted to see working groups concerned with protection of labour merge with NOT cells, hoping thereby to instil scientific management with more concern for the individual worker. On the national level they recommended that Rabkrin and the Council on Scientific Manage-

⁵⁸ *Pravda*, 13, 14 February 1924, p. 5.

⁵⁹ M., 1924. Kerzhentsev, whose real name was Lebedev, also wrote a book on proletarian culture: *K novoi kul'ture* (M., 1921). A Soviet journalist and diplomat in Western Europe, he later wrote a popular biography of Lenin during the 1930s and a book on Ireland. He is said to have died in 1940, in unknown circumstances. (See the note on Kerzhentsev in L. Trotsky, *Sochineniya*, vol. XXI (M., 1927), p. 472.)

⁶⁰ 'Vsesoyuznaya konferentsiya ligi "Vremya"', *Trud*, 16 March 1924.

ment within this Commissariat be recognized as the centre of the NOT movement. Such recognition would keep the labour institutes closely coordinated with economic practice, within a common plan of research.

In a follow-up article, Kerzhentsev compared the two platforms, and pointed up what he considered the essential differences.⁶¹ 'The Group of Communists', in his opinion, wanted to base innovations in labour methods on a mass movement organized in cells, while the Central Labour Institute was suspicious of the masses and considered it necessary only to win the sympathy of plant managers. Their approach was to work from the top down, importing experts from outside on commercial principles and selecting the most efficient workers to be 'big brothers' of the rest. 'The Central Labour Institute proposes to prepare *aristocrats of the working class, priests of scientific management*', thereby depriving 'the mass of workers, in a purely Taylorist fashion, of initiative and organized participation in rationalization. . . .' A mass movement for labour rationalization would attempt to stimulate better work by appealing to the pride and initiative of the workers, while the Central Labour Institute, influenced by the Americans' pseudo-scientific management with its hypocritical system of bonuses and higher wages, assumed in its platform that only monetary gain 'can attract the wide masses of the working class to our side'. Kerzhentsev believed that a Soviet system of scientific management could be developed only on the basis of the class interests of the proletariat. This meant that all the 'bourgeois, anarcho-syndicalists, Mensheviks, and Bogdanovists in the NOT movement' should be weeded out (presumably leaving 'The Group of Communists' in firm control).

V. V. Kuibyshev, Chairman of the powerful Central Control Commission of the party, as well as head of the Rabkrin Commissariat, made apparent from the start of the Conference that his support was not wholeheartedly on the side of his own employees and their allies.⁶² In fact, if the signs had not been sufficiently clear prior to the Conference, Kuibyshev's opening remarks made it plain that the party leaned strongly towards the views of Gastev and his group. Although the

⁶¹ 'Dve platformy po NOT', *ibid.*, 20, 22 February 1924.

⁶² The Conference, held from 10-16 March 1924, was composed of 383 delegates, two-thirds of whom were non-party members. The break-down according to occupation showed that 87% were *intelligenty* (here, no doubt, meaning as much white-collar workers as intellectuals, since only 72% of the delegates indicated that they had received any higher education); 10% of the delegates were registered as workers, and 2% as peasants. The vast majority (70%) were from Moscow (*Trud*, 18 March 1924, p. 5). The deliberations and resolutions were published in three documents: *Byulleten' 2-oi vsesoyuznoi konferentsii po NOT* (M., 1924); *Vtoraya vsesoyuznaya konferentsiya po NOT* (M., 1924); *Rezolyutsii 2-oi vsesoyuznoi konferentsii po NOT* (M., 1924). This writer has not been able to locate copies of the above documents, and has relied, for the account which follows, on the articles in *Trud*, 11, 12, 14, 15, 18 March 1924, and on the extensive coverage in *Organizatsiya truda*, 1924, no. 2-3, pp. 3-7, 32-85.

organizational work of the Conference had been largely in the hands of Gastev's enemies, the delegates quickly sensed the drift of things.

Kuibyshev gave both the opening and closing remarks of the Conference. In his greeting he sounded a conciliatory note, making it clear that he approved of much for which the Central Labour Institute stood. Taylorism could not be rejected *per se*, he affirmed; the most 'useful' parts of the system, as Lenin had pointed out, must be tested and selected in practice. 'Under our conditions, in which strong trade unions exist, problems concerning the intensification of labour can be solved, with the greatest achievements.'⁶³ Kuibyshev accepted the use of incentive wage scales as a necessary stimulus to productivity. As for the plan to create cadres of instructors from the most skilful workers, he considered it a task of the first importance. Rabkrin would assume responsibility for coordinating all aspects of the NOT movement, including those cells of the 'Time League' which sprang up in local enterprises.

In the sessions which followed these remarks, critics of the Central Labour Institute were careful to moderate their attacks with cautious doses of praise for their opponent, a tone previously absent in the press campaign.⁶⁴ Even so, they sounded the familiar note that the Central Labour Institute had wasted three years of research on primitive methods of cutting and trimming metal by hand, and that from this 'narrow base' a whole new culture was being preached. The Institute was acting as if 'there is no scientific management but the Central Labour Institute and Gastev is its prophet'.⁶⁵

To give the delegates a better idea what the Central Labour Institute was doing, one of the final sessions of the Conference was held at its headquarters in Moscow, where Gastev arranged a series of talks and demonstrations. Testimonials were given by production engineers, active in Soviet industry, and by industrial arts teachers who praised the speed and accuracy with which factory workers could be trained by the Institute's methods. Gastev was careful to point out that the Institute's research had now advanced from a study of simple hand operations in metallurgy to the study of lathe-work and the use of other machine tools. Though these performances did not entirely silence criticism in the discussion which followed, the majority of delegates voted resolutions favourable to the Institute, approving its 'preparation and instruction of labour skills' and its methodology 'based on careful experiment and analysis of labour operations', expressing satisfaction that the Institute was moving on from primary labour

⁶³ *Trud*, 11 March 1924, p. 2.

⁶⁴ See e.g. A. Shitikov, *Voprosy truda*, 1924, no. 1, p. 72.

⁶⁵ *Organizatsiya truda*, 1924, no. 2-3, pp. 56-57.

operations to the instruction of workers in machine labour, and noting the need to spread its method and experience.⁶⁶

A general resolution affirmed 'the possibility of increasing intensification of labour in those areas of industry where the current level of labour intensification lags behind the corresponding level in capitalist countries'.⁶⁷ This did not have to mean sweat-shop conditions, but could be accomplished by special training in more efficient labour motions, proper breathing, and adequate rest. The Conference resolutions went on to approve of monetary incentives, both for individuals and groups, as a stimulus to greater intensification.

In the final speech of the Conference, Kuibyshev concluded:

The work that has been reported to us by the Central Labour Institute is the most valuable contribution in the sum total of work by institutions, organizations and individuals involved in scientific management.⁶⁸

While the Conference confirmed Rabkrin and its Council on Scientific Management as the organizing centre of NOT activities, the Council was to be reorganized, giving Gastev and his group a greater voice. In sum, the Central Labour Institute viewed the decisions of the Conference as a triumph for its position. By and large, it was. While Rabkrin made clear its authority, the fundamental assumptions of the Institute were recognized as standards for the entire Soviet economy.

Conclusions

The resolutions of the Conference of March 1924 formed the basic guidelines for Soviet work in the rationalization of human labour during the following years of rapid industrialization. How these decisions were actually put into effect is, of course, difficult to assess and deserves study. The Conference glossed over the tension which ordinarily exists in any economy between attempts to increase human efficiency on the one hand and, on the other hand, to protect the health and monetary interests of the individual worker. In the United States during the 1920s trade union resistance to scientific management was also eroded to a certain extent, due partly to union lethargy and partly to the efforts of the Taylor Society to take union leaders into its confidence.⁶⁹ But scattered opposition to time studies and incentive pay continued throughout this period in the United States, even among union leaders. American trade unions were never captured by the

⁶⁶ *Ibid.*, p. 51.

⁶⁹ Jean Trepp McKelvey, *AFL Attitudes toward Production 1900-1932* (Ithaca, N.Y., 1952), pp. 114-26; Milton J. Nadworny, *Scientific Management and the Unions 1900-1932* (Cambridge, Mass., 1955), pp. 142-54.

⁶⁷ *Ibid.*

⁶⁸ *Ibid.*, pp. 66-67.

scientific managers, while this became the case in the Soviet Union during the 1920s. The demand of the Soviet state for rapid industrialization and the weakness of the old trade unions, which lost their mass following during the years of civil war, destroyed whatever natural balance may have existed between a labour movement jealous of its members' immediate material welfare, and industrial managers whose first consideration was productivity. These new industrial managers were drawn in many cases from the ranks of skilled labourers and old trade union leaders, but they acquired interests and modes of thought different from those of the rank and file, while still pointing to their working-class background as proof of their solidarity with the working masses. That any conflict of interests could exist was denied as these new managers acquired full sway over the world of Soviet industry and, under Stalin's direction, forced the pace of industrialization by all available means after 1929.

The foregoing article has concentrated on Gastev's crucial role as Director of the Central Labour Institute during the early 1920s. His subsequent career deserves further study as an important element in Soviet history. By 1924 the guidelines of Gastev's later work had been formulated: he had articulated for Soviet society a work ethic which justified sacrificing the present to the future, the consumer to the producer, and the individual to the work collective. It is not surprising that his ideology and approach to vocational training, which stressed the intensification of labour, should prove attractive to Soviet industrial managers in a labour-rich, capital-poor country. During the massive industrialization after 1929, Gastev was a member of the collegium of the Ministry of Heavy Industry, while continuing to head the Central Labour Institute. He was also head of the Soviet Bureau of Standardization and editor of its journal as well as the journal of the Society of Red Directors. In January 1936 the Commissar of Heavy Industry, Ordzhonikidze, placed Gastev in charge of preparing cadres for the Stakhanovite movement.⁷⁰ By 1938, according to a recent Soviet estimate, nearly a million industrial workers had been taught new skills by the methods and instructors of Gastev's Institute—an indication of the scale his influence reached in these years. While his was hardly the only voice in this area, it became a powerful influence on Soviet society, promoting a kind of Puritan ethic in secular garb.⁷¹ It is for this reason,

⁷⁰ For Gastev's role in the Stakhanovite movement, see A. K. Gastev, *Organizatsiya truda v stakhanovskom dvizhenii* (M., 1936), and his article in *Organizatsiya truda*, 1935, no. 11, p. 6ff. For his earlier contacts with the Gilbreths and with the Ford Motor Co., see *ibid.*, 1924, no. 4, pp. 51-52; his article 'Marks i Ford', in *Ustanovka rabochei sily*, 1927, no. 9-10, pp. 4-7 and letters exchanged with the Ford Company in *Organizatsiya truda*, 1928, no. 2, pp. 55-57.

⁷¹ See 'Ekonomicheskaya politika KPSS i nauchnaya organizatsiya truda', in *Voprosy istorii KPSS*, 1966, no. 12, pp. 2-16. For a fuller analysis of the reasons for

no doubt, that the reputation and work of the Central Labour Institute and its founder have been rehabilitated in the Soviet Union in recent years. The uncomfortable figure of Alexei Gastev, with his military crewcut and tunic, steel-rimmed glasses and stern look, once again stares out from the pages of Soviet books and periodicals. His shade has returned to trouble the friends of other values, the Bogdanovs, Kerzhentsevs, Zamyatins, Orwells and Huxleys, past and future, who prefer another vision of human work and culture.

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the revival of interest in Gastev and the NOT movement in recent years, see Samuel Lieberstein, 'Technology, Work, and Sociology in the USSR: The NOT movement', *Technology and Culture*, January 1975, pp. 61-64.