

## SOVIET TAYLORISM REVISITED

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TAYLORISM was introduced into the Soviet Union in the 1920's with guarded optimism, ambivalence, and controversy. A number of analysts, nevertheless, charge that Taylorism was adopted without sufficient forethought and with only a cursory Marxist critique.<sup>1</sup> A recent study, in fact, suggests that the terms of the debate were largely between a narrowly technicist Taylorism and a Taylorism modified by industrial psychology and protection for the worker.<sup>2</sup>

This raises the question whether Marxist input was indeed so negligible, and if so, why? Given the highly charged ideological atmosphere of the time, how did the adoption of Taylorism escape ideological introspection? Who were the defenders of the 'communist point of view' and why was their protest limited to a modification of Taylorism?

A second question which arises is whether Taylorism was simply a transplant or did it contain an autonomous rationale? Did Taylorism in the Soviet Union respond to indigenous needs and was it as a consequence markedly different from that of the West? Was Soviet Taylorism somehow unique?

These questions are of considerable importance because they relate Taylorism to the larger issues of the 1920's, namely, how to implement ideological goals under adverse political and economic conditions, how to learn and borrow from the capitalists while constructing a non-capitalist path of development.

This article will focus on the controversy which these questions engendered and, in particular, on the attempts to formulate a critique of Taylorism. It should be noted that the critique was marred from the outset by a more general ideological ambivalence towards capitalism. To Marxists, capitalism embodied all things evil but at the same time created the pre-conditions for socialism. This potential tension was accentuated under the circumstances of underdeveloped Russia—should capitalist inroads be welcomed or by-passed? Lenin, in *Development of Capitalism* (1896–98), left no doubt that capitalism should be welcomed. In the post-1917 USSR the question became more complex. Given that the

capitalist stage was unevenly developed and had produced only incomplete pre-conditions for socialism, what was the ideologically correct attitude? Clearly, socialists under the dictatorship of the proletariat were not simply replacing the capitalists. The political and economic equation had been fundamentally altered. But had the function of capitalism been played out? This was the far more vexing question and led to a decided ambivalence on the part of even the most ideologically committed.

In more specific terms, there was confusion on what attitude to adopt towards selected aspects of capitalism. It was not difficult to discard anything which smacked of profit-making but what was to be done with the technological or scientific elements of capitalism? This underlying ideological uncertainty cast the terms of the debate over Taylorism. Two distinct positions emerged, which we shall examine in greater detail. One was a self-proclaimed defence of the 'communist point of view', represented by Platon Kerzhentsev and his organization, the Time League (*Liga Vremya*).<sup>3</sup> The other was a more avowedly Taylorist point of view, represented by Aleksei Gastev and his organization, the Central Labour Institute (*Tsentral'nyi Institut Truda—TsIT*).<sup>4</sup> For the purposes of this article, the first group may be called 'ideologues' and the second 'pragmatists'.

While they clashed on many issues, the two groups coincided in their assumption that Soviet Taylorism, that is, the scientific organization of labour (*Nauchnaya Organizatsiya Truda—NOT*) was linked to the cultural needs of the system. In fact, the *NOT* movement was to a large degree a conscious response to Lenin's dictum 'learn to work'. The task prescribed for *NOT* was both more elementary and more ambitious than the more typical efficiency goals of industrialized societies, i.e. to help erect the cultural infrastructure essential to the development effort. More than that, Soviet Taylorists discerned in *NOT* traces of the 'new culture' indicative of the transition to socialism. These enthusiastic expectations, abundant in the Soviet Union of the 1920's, endowed Soviet Taylorism with a unique character.

Since it was inevitable that Lenin's attitude should be a factor in the controversy over Taylorism, we shall first review Lenin's position and then turn to the debates between Gastev and Kerzhentsev.<sup>5</sup>

### *Lenin and Taylorism*

To the extent that Lenin conveyed an ideological message on Taylorism, it was a contradictory one. Taylorism was exploitative but it was at the same time a useful mechanism for increasing productivity and instilling efficiency. Although some analysts draw a sharp distinction

between Lenin's pre-1917 censure and subsequent espousal,<sup>6</sup> it seems more accurate to say that Lenin echoed a dual note towards Taylorism from the start. As early as 1914 he contended that Taylorism was at once a way of extracting the last ounce of sweat from the worker and of securing 'an enormous gain in labour productivity'.<sup>7</sup>

Of particular interest is Lenin's suggestion that Taylorism was not entirely successful because it was 'confined to each factory' and ignored the 'distribution of labour in society as a whole'. In other words, it was not so much the inherent methods and principles of Taylorism that Lenin rejected as their use and application. He implied further that socialists would make better use of the instrument devised by capitalists. 'The Taylor system—without its initiators knowing or wishing it—is preparing the time when the proletariat will take over all social production and appoint its workers' committees for the purpose of properly distributing and rationalizing all social labour.'<sup>8</sup> Thus, to Lenin, Taylorism was linked with the general advance of capitalism, which was positively interpreted since it paved the way for socialism. The essential question for Lenin became a political one: who would control and use Taylorism.

Lenin's position was not substantially altered in the post-1917 period when he reiterated criticism of Taylorism as 'refined brutality' but advocated its adoption as the 'last word of capitalism'. Again the key question was one of political control: 'The possibility of building socialism depends exactly upon our success in combining Soviet power and the Soviet organization of administration with the up-to-date achievements of capitalism'.<sup>9</sup>

The proposition which emerges from Lenin's discussion of Taylorism is that capitalist methods could be employed to build socialism. In a sense, this was Lenin's response to the residual ambivalence towards capitalism, carried over into the post-revolutionary period. Indeed, Lenin argued that workers, within the framework of the dictatorship of the proletariat, were in a unique position to take advantage of capitalist workmanship. 'For the first time after a century of labour for others . . . there is the possibility of *working for oneself*, and with the work based on all the achievements of the latest technology and culture.'<sup>10</sup>

An interesting contrast to Lenin's position is provided by Bogdanov, who opposed Lenin on a wide array of questions, including Taylorism. Although Bogdanov also spoke approvingly of the efficiency aspects of Taylorism, he diagnosed several potential problems. Since Taylorism was geared to the superior, not the average worker, it would create a rift in the working class, with the best workers extolled for heroic efforts and the average ones dismissed as idlers and loafers. Moreover, the constant repetition of the same task would lead to a dulling of the senses and be counter-productive to the needs of advanced industrialism. Finally,

Bogdanov suggested that Taylorism could result in a large increase of managerial personnel, the requisite time-keepers and overseers, with a concomitant decrease in the actual productivity of labour. Bogdanov thus drew the conclusion that undesirable consequences—of a political as well as economic nature—could be expected from Taylorism.<sup>11</sup>

After the revolution Bogdanov challenged Lenin on the larger proposition that the capitalist achievements could serve socialist ends. Although he too believed that capitalism was the necessary pre-condition for socialism, he was not convinced that adoption of bourgeois science, technology and culture was the main task during the transitional period. Rather, he argued that the theoretical premises would have to be re-worked and a proletarian science and culture consciously developed. Only this effort, and not political control, would ultimately secure the transition to socialism. Essentially, in modern terms, Bogdanov was asserting that the 'latest achievements of capitalism' were not value-free and required a fundamental alteration before they could serve workers' interests.<sup>12</sup>

Lenin, of course, also said that Taylorism would have to be adapted 'to our own ends', but his specific proposals suggested hedging capitalist technique by political means rather than a theoretical revamping. As we shall see, the unsettled controversy between Lenin and Bogdanov over whether capitalist means could be used to achieve socialist ends formed the background of the debates between the pragmatists and the ideologues on Taylorism and contributed to ideological ambiguity.

### *The First NOT Conference*

Although Lenin had urged the adoption of Taylorism immediately after the revolution, the real impetus for Taylorism did not come during the ideologically fervent period of war communism but during the more equivocal period of NEP. The severe deterioration of the economic situation drew a crescendo of calls for discipline and greater labour productivity. In January 1921 the First All-Russian Initiating Conference on the Scientific Organization of Labour was convened by Trotsky.<sup>13</sup>

The more ideologically inclined, however, offered sharp resistance to a wholesale resort to Taylorism and to capitalist methods. Of the 200 participants at the conference, two discernible groups emerged, one comprising the 'engineers-Taylorists' and the other the 'social-minded', as one observer labelled them.<sup>14</sup> The former found that Taylorism had 'by and large justified itself' and proposed its use in the Soviet Union 'almost without reservation'. The latter not only proposed 'a special approach to Taylorism (as a system of capitalist exploitation)' but also came close to 'completely rejecting all of Taylor's works and his

school'.<sup>15</sup> Moreover, the 'social-minded' insisted on a strict distinction between the 'scientific organization of labour', which they supported, and Taylorism, which harboured 'unscientific aspects', such as the 'excessive increase in the efforts of labour without taking into account the general balance of the energy of the worker'.<sup>16</sup>

These two points of view, voiced by disparate factions at the first *NOT* Conference, took a more concrete shape in the Kerzhentsev-Gastev debates. With Lenin's backing for *TsIT*, Gastev took the lead in defining and elaborating his concept of *NOT*. When his ideas became more publicized, however, they were subjected to increasing scorn and criticism, culminating in a campaign by Kerzhentsev to end Gastev's predominance in *NOT* affairs. The ideologues accused the pragmatists of a crude, technicist approach to *NOT*, while the pragmatists countered with the charge that the ideologues were 'literary-muddled' and overly bookish.<sup>17</sup>

#### *Definition and Scope of NOT: Pragmatists vs. Ideologues*

Gastev's position on Taylorism was essentially a blanket endorsement. To him the questions of exploitation or of ideological discrepancy were largely irrelevant. His basic premise was that political-ideological matters were under the purview of the dictatorship of the proletariat and that his assignment was a technical one, i.e., promotion of production through *NOT*. Indeed, he felt that *NOT* could reach its full potential only in the employ of socialists. Under capitalism, Taylorism was submitted to the distorting effects of a profit orientation. Under state capitalism, 'the juncture between capitalist and socialist economies', the scientific organization of labour would be guided solely by efficiency, not profit, criteria. Moreover, Gastev predicted that *NOT* under socialism would be firmly anchored in production needs because productivity and the production enterprise formed 'the basis of the whole economic and political organism'.<sup>18</sup>

In keeping with this utilitarian approach, Gastev offered a simple and straightforward definition of *NOT*. *NOT* was the 'process of organizing labour in a precise and calculated way'. Although the factors of time and cost had previously been taken into account, they lacked the exactitude which a scientific method could bring. To express it in Gastev's own words:

The time has come for us to submit all methods of work to  
*preliminary study,*  
 after which, every way and every method we  
*divide into separate parts,*  
 these parts we compare to one another and out of them we choose  
*the best.*

After that, from these parts we form a special  
*series*

and, finally, we arrange these series in such a way, so that work might be the most

*economic,*  
 so that the least time might be spent, the least fatigue might be felt, and ultimately, so that work itself might be the most  
*precise.*

That is the essence of the scientific organization of labour.<sup>19</sup>

Gastev's was essentially a building block conception of *NOT*—only on the basis of modest organizational designs and solid data could generalizations be made about larger organizational units. The pragmatists identified strongly with the *TsIT* orientation of work on a 'narrow base'. Rather than starting with 'far-fetched schemes', *TsIT* proposed to concentrate on a single operation, the lowest unit, and then proceed to the whole. 'The organizational network or administrative scheme will develop spontaneously, tied closely and organically to the work units through a mass of inter-connections, and arising out of them.'<sup>20</sup>

As an example of their approach to *NOT*, the pragmatists recommended focussing on the lowest level of production—the workshop. What could be more effective than to take a basic work operation, reorganize it, streamline it, and thereby demonstrate immediately and directly the ability of *NOT* to save time, effort, and materials. In contrast to the bookish approach of the ideologues, there would be 'absolutely no need for any meetings, long discussions, no need for various factory and cell conferences'. If there were any meetings to be held, they should be only for purposes of demonstration. The 'best propaganda and agitation' was simply for the workers to see and compare an efficient, organized work-place with a chaotic, unorganized one. The results could be extended to the rest of the factory simply by 'administrative order'.<sup>21</sup>

In keeping with this approach, Gastev proposed to investigate the simplest work motions to determine the most efficient *modus operandi*. He chose blacksmiths and metalworkers as his focus. Through the use of the cyclometer, he attempted to eliminate all superfluous gestures and expenditures of energy. Gastev's detailed studies of striking a chisel with a hammer (*rubka zubilom*), quickly became the hallmark of *TsIT* and an object of notoriety.

While the ideologues concurred on the basic premise that the scientific organization of labour should inject efficiency and promote greater productivity, they diverged sharply on the definition and scope of *NOT*. To their way of thinking, Gastev's definition of *NOT* and his preoccupation with work on a 'narrow base' were picayune and myopic.

'Only on . . . a wide base, encompassing the organizational creative activities of man as a whole', could the multi-dimensional and scientific principles of the organization of labour have any substantial impact.<sup>22</sup>

Essentially, the ideologues dismissed Gastev's endeavours as being tangential to *NOT*. As Kerzhentsev explained, 'the main task of the scientific organization of labour consists not of eliminating separate defects, found here and there, but precisely in establishing standards, that is, models and norms, which, under similar conditions, may be applied throughout'. To remain blind to the distinction between 'preparatory work' and the 'actual work' of *NOT* was to 'vulgarize the ideas of *NOT*'.<sup>23</sup> Given this standpoint, the ideologues concluded that *NOT* could not be confined to questions of production; its sphere of action was society as a whole. 'To a Marxist', *NOT* refers to 'all aspects of production', to technology, process, labour, and management, that is, 'to the organization of things as well as of people'.<sup>24</sup> Principles derived from the rationalization of production would eventually be applied to every organizational activity, be it schools, the state apparatus, or the Red Army.<sup>25</sup>

To the ideologues *NOT* was directly related to ideological concerns. The most characteristic features of *NOT* were at the same time features of fully developed communism. Both involved the development of scientific methods, organization, and planning. Similarly, *NOT* constituted an important dimension of the transitional period because it 'prepared those indispensable elements from which the society of the future will be created'.<sup>26</sup>

Precisely for this reason the ideologues charged that it was grossly misleading to treat *NOT* as a 'purely technical' problem as the pragmatists did. *NOT* was first and foremost a 'class problem', and involved an ideological clash between capitalist and socialist premises. *NOT* had penetrated into Russia as 'a product of advanced capitalist culture', with its methods and principles developed 'in the laboratory of capitalism'. It expressed the 'ideology and practical values' of bourgeois culture. As such, it was unacceptable to Marxists without a thorough ideological re-working.<sup>27</sup>

When the pragmatists offered their own criticism of Taylorism as a 'product of a formal mental creation, not based on economic realities',<sup>28</sup> the ideologues immediately countered with the argument that Taylorism was eminently a product of capitalism, its functions, and requirements. To divorce Taylorism, the capitalist *NOT*, from its economic base was an indication of 'elementary mistakes' of theory and displayed 'an enormous illiteracy in Marxism'.<sup>29</sup>

At the same time the ideologues admitted that there was an inherent contradiction in *NOT* itself: it threatened maximum exploitation of the

worker while promising maximum economizing of worker strength and upgrading of workers' skills.<sup>30</sup> Thus *NOT* was at one and the same time 'an alluring weapon for the refinement of exploitation and a methodological precondition for the completion of the socialist transformation of society'.<sup>31</sup> Herein lay the seeds of ideological ambivalence, making it difficult to reject Taylorism out of hand. Rather, the ideologues chose the alternative of modifying Taylorism.

According to the ideologues, a 'class point of view' towards *NOT* would include the following features:

1) workers were the main focus of *NOT* and should become its principal impetus. Through a process of education, agitation and propaganda, workers would grasp the utility of *NOT* and implement its principles. Normative incentives and appeals would further attract workers to *NOT*.<sup>32</sup>

2) the point of departure for *NOT* efforts should be the protection of worker interests rather than the intensification of labour. Thus *NOT* should not concentrate on individual exertion but should orient itself toward production processes, efficient utilization of machines, and rationalization of plant. Ultimately, advanced technology and automation would transfer 'slave labour' to machines and liberate man.<sup>33</sup>

3) the existing fragmented, piece-meal approach to *NOT* should be replaced by a comprehensive, systemic approach, with *NOT* expanded from the production enterprise to society as a whole. Planning of the parts and the whole, under socialism, would guarantee harmony of interests between labour and production.

4) the communist party should exert leadership in the field of *NOT* to ensure a 'communist approach' and a 'class point of view'. The XII party congress was a step in the right direction. It signalled the growth of *NOT* beyond the capitalist framework in so far as 'organization was for the first time recognized as a central governmental problem', not limited to the discretion of separate enterprises, as was more commonly the case.<sup>34</sup>

The pragmatists were not reluctant to jump into the fray and defend their own point of view. If there were any problems with *NOT* it was because the 'non-production intelligentsia', who understood *NOT* in a 'purely ideological' way, were meddling in *NOT* affairs. The leaders of *NOT* cells were not 'production elements but propagandists in a factory and knew nothing about its operations'.<sup>35</sup> Imprecision and slowness in implementing *NOT* were the main impediment rather than 'faulty planning' or still larger theoretical schemes.<sup>36</sup> In order to correct the situation, the management had to be approached and persuaded of the effectiveness of *NOT*. Finally, the 'most realistic means' of attracting workers to *NOT* was an improvement in their material welfare, although



the trade unions could also play an important part in mobilizing workers.<sup>37</sup>

The pragmatists' point of view was ultimately adopted, largely owing to the pressure of the economic situation, although this was not the sole reason.<sup>38</sup> There were several weaknesses in the ideologues' position which undermined their effort. From the start they exhibited a certain amount of equivocation towards capitalist methods, labelling Taylorism the epitome of capitalism as well as the key to the future. They failed to offer a clear-cut alternative to Gastev's own straightforward and uncomplicated approach. In particular, they did not suggest fundamental changes in the work process nor in authority relations at the work-place; they fell short of devising a scheme for a 'socialist organization of labour' which would differ substantially from a 'scientific organization of labour'. The irony of their position was that they proposed to safeguard workers' interests, not by rejecting or even radically altering Taylorism, but by expanding its principles to encompass the entire society, a *NOT* writ large. Moreover, they did not relate their 'scientific organization of society' to the political and economic setting, a serious gap in their organizational analysis. They emphasized the 'class point of view' and workers' interests, but ignored the actual power structure and potential power conflicts. In a fundamental way, they shared with the pragmatists the implicit assumptions of the transitional period that class conflict was being superseded by scientific management, and remaining tensions would be resolved by scientific arbitration.

#### *Implementation of NOT: Tsentral'nyi Institut Truda vs. Liga Vremya*

The theoretical differences between the pragmatists and the ideologues reverberated in the organizations which they established to implement their ideas. *TsIT*, founded in 1921, comprised a series of laboratories to develop a 'new industrial pedagogy' and a training programme for a designated group of workers. *Liga Vremya*, founded in 1923 as a reaction to and protest against *TsIT*, consisted of a broad agitational campaign to build a base of support for *NOT* and to encourage a programme of self-help.

The organization of *TsIT* into a range of bio-mechanical, physiological, and psycho-physiological laboratories conformed with Gastev's emphasis on the human factor as the unknown dimension in the scientific organization of labour. Gastev readily contrasted Taylor's focus on machines and work processes to his own concern for developing 'an exact science of organizing a plant filled with live people'.<sup>39</sup> Man was the critical factor to be studied and to be changed by applying *NOT*

principles. Although the 'human machine' was capable of producing miracles, not one-tenth was known about this live machine, lamented Gastev. For this reason *TsIT* was dedicated to examining the 'separate mechanisms [of the human machine] *in operation*'.<sup>40</sup>

Based on his study of muscle movements, elementary work motions, and rationalized conditions of work, Gastev devised a course of instruction for worker recruits. During a period lasting three to six months the trainee was taught the basic skills of his trade in a carefully-monitored setting. The work-place, equipment, and programme of training were all strictly standardized, with explicit and detailed instructions, as well as continuous control and verification.<sup>41</sup> To Gastev, these efforts reflected the 'new science' of social engineering, an entirely new approach to produce 'new people'.<sup>42</sup>

Although Gastev declared the 'renovation and creation of the labour force . . . the most urgent task',<sup>43</sup> his immediate aim was not training on a mass scale. Rather, he hoped to create a nucleus of workers who would serve as 'instructors of production'. According to Gastev, it was far better to 'educate and prepare a smaller number of good worker-directors (*rabotnikov-pravyashchikh*) than a large number of inexperienced persons, discrediting the pursuit of the organization of labour in the eyes of the working masses'. He explained further:

Experienced workers, knowing to perfection their own, even if very small, profession, should enter production from the institutes where they were trained. They will serve as an example of a fully modern worker, an older brother and a civilizer of the factory masses.

Gastev also suggested that such 'instructors in production' be paid an encouraging wage (which would act as a material stimulus to more backward workers), attend special seminars, and be sent abroad periodically to study 'foreign techniques of management and organization of labour'.<sup>44</sup> By the end of 1923, 100 such instructors had been trained.<sup>45</sup>

In contrast to *TsIT*, the *Liga Vremya* hoped to attract a wide audience on the basis of a simple appeal, 'struggle for time'. The League's charter stated its goal succinctly: 'To struggle for the correct utilization and economy of time in all of its vestiges in public and private life, is the basic condition for the realization of the principles of *NOT* in the USSR'.<sup>46</sup>

Within three months of its establishment, the League boasted 120 cells in Moscow with an average of 33 members per cell, that is, about 4,000 members in all. Of these, 62% were party members.<sup>47</sup> By the end of 1924 about 800 cells were in operation, 40% of the members of which belonged to the party and the Komsomol.<sup>48</sup> Of the 800 cells, 20% were attached to enterprises, 35% were in state institutions, 25% in universities.<sup>49</sup> A good number of cells were in the Red Army and were

'the most active and cohesive' of all the cells.<sup>50</sup> Kerzhentsev himself claimed a membership of 25,000 within the first year of existence.<sup>51</sup> Cells were established in 75 cities.<sup>52</sup> As a result of the increase in cells and the League's influence in the *NOT* movement, its name was changed to *Liga Vremya/Liga NOT* in March 1924 and then in July simply to *Liga NOT*.<sup>53</sup>

Activities in the 'struggle for time' varied between regions and organizations. Many cells simply held agitational meetings and waged a press campaign. Some tried to introduce 'efficiency measures' into their offices or places of work. A few instituted 'penalty stamps' for latecomers. Others started a campaign (which proved to be one of the most popular) against the endless queues typical of the Soviet scene. All were encouraged to wear a medal inscribed *Vremya*.

Kerzhentsev favoured simple and broad-based measures to develop a 'feeling for time' and to pave the way for a 'smooth functioning of work and life'. In this spirit, he proposed that watches be given to 'heroes of labour' and that whistles or sirens mark the time of day.<sup>54</sup> He suggested the use of 'chrono-cards' and appointment books. He attacked the Russian predilection for 'an endless quantity of meetings': the number of meetings should be reduced; meetings should be carefully prepared; a time for the end as well as the beginning of the meeting should be designated beforehand, and all speeches should be limited to 5–10 minutes.<sup>55</sup>

Indicative of the campaign mood was the following set of guidelines:

Instead of 'perhaps'—a precise calculation.

Instead of 'anyhow'—a well-thought-out plan.

Instead of 'somehow'—a scientific method.

Instead of 'sometime'—on 15 October, at 20.35 hours.<sup>56</sup>

While Kerzhentsev admitted that the 'struggle for time' was in itself only a simplified aspect of *NOT*, he believed it could serve as a preliminary step towards greater organization and better planning throughout society.<sup>57</sup> If nothing else, Kerzhentsev contended, the league's campaign would at least remove *NOT* from the confines of the laboratories and prevent 'chronometric barbarism' from pervading the *NOT* movement.

### *Soviet Taylorism and the New Culture*

Although the ideologues attempted to draw sharp distinctions between themselves and the pragmatists and to lay claim to a Marxist position, they were consistently hampered by a lack of a clear alternative to Taylorism. Indeed, they considered the adoption of *NOT*, that is,

Taylorism in its Soviet translation, to be urgent. As Kerzhentsev insisted, *NOT* was more critical for the Soviet Union than for America because it furnished principles of 'how to organize work even in the presence of scarce resources'. *NOT* could secure the 'maximum effect with the minimum loss of strength and means'.<sup>58</sup>

Scarce resources were in fact the real impetus for embracing Taylorism. In contrast to American Taylorism which arose in response to the problem of 'systematic soldiering' among an industrialized labour force,<sup>59</sup> Soviet Taylorism was spurred by the problem of an unskilled and barely literate labour force.<sup>60</sup> Lenin complained more than once that the Russian was a bad worker in comparison to his German or American counterpart.<sup>61</sup> Preobrazhensky offered an even broader diagnosis, tracing the dearth of a work ethic to the Russian national character, which cut across class lines. Peasants shirked steady work habits because their life rhythms were governed by seasonal spurts of effort. At the same time the intelligentsia obstinately preserved 'haughty-petty-bourgeois-*oblomov* relations' which were irrelevant to production needs. In its current state the Russian national character was too laggard to respond to the needs of the new economy and new technology, Preobrazhensky lamented.<sup>62</sup>

The remedy suggested was a good dose of Taylorism. Every complicated task could be subdivided into its simpler component parts and organized in a scientific fashion to produce maximum results in relation to effort. Workers with relatively little skill and even untested work habits could then be fitted into this scheme without lowering productivity. What counted was the superior organization of the work process—not the level of skill of the workers. To Lenin, who was already a firm believer in the power of organization, this was both the genius and the promise of scientific management.

Krupskaya voiced a similarly sanguine appraisal of what Taylorism could achieve in the midst of cultural backwardness. 'The division of functions and the introduction of written instructions allow for the placement of less qualified people in any given job'. She expressed irritation with administrators who simply complained about the lack of qualified personnel. 'Only poor administrators say that. A knowledgeable administrator can use people with second-rate qualifications if he instructs them properly and divides the work among them in an expedient fashion'.<sup>63</sup>

If there was little disagreement on the utility of *NOT* in circumventing cultural shortcomings, there was far more discord on the role of *NOT* in fostering cultural traits of socialism. That *NOT* was indeed an 'indispensable element of the new culture' was not questioned,<sup>64</sup> despite ideological misgivings towards procedures emanating from the

'laboratory of capitalism'. Preobrazhensky specifically endorsed a widespread, voluntary growth of *Liga Vremya* cells to instil a 'new culture' of industriousness, punctuality, and accuracy.<sup>65</sup> Protests erupted only when Gastev went a step further and intimated a coupling of production culture with the forthcoming proletarian culture.

To Gastev, the Soviet *NOT* would involve a 'reorganization of life' and a creation of a 'new production culture', thus surpassing the American or German experience.<sup>66</sup> In this vein, and in keeping with *TsIT* principles, he predicted a re-definition of culture, meaning in the first instance 'technical and social skill'.<sup>67</sup> *TsIT*, Gastev noted, was eminently suited to instilling such a labour culture. Its programme was designed to teach new recruits basic work motions, familiarise them with tools and machines, and almost imperceptibly transform peasants into workers.<sup>68</sup> To Soviet youth he offered the following prescription:

Labour—is your *strength*  
 Organization—your *skill*  
 Regime—your *will*  
 This then is the present  
                   *cultural aim*  
 And altogether it equals the  
                   *cultural revolution*<sup>69</sup>

Looking into the future, Gastev forecast a society which would boast of 'striking anonymity', its common norms and rhythms pervading life and shaping the new proletarian culture.<sup>70</sup>

These ventures into the theoretical sphere were more than the ideologues could tolerate. Although the efforts of *TsIT* were by themselves possibly useful, probably innocuous, Gastev's pronouncements on culture made a mockery of the concept of 'proletarian culture'. Bogdanov, as the foremost theoretician on proletarian culture, took Gastev to task for equating work habits and production behaviour with culture. 'Proletarian life is a whole', comprised of various dimensions, not just work; it was wrong 'to break off one piece, even if it is very important, basic'. Gastev's image of the future society recalled a 'militarist drill' rather than workers' collectivism.<sup>71</sup> Almost ten years later, at Gastev's zenith, similar criticisms were echoed. One critic conceded that Lenin himself had tied the cultural revolution to the technological revolution (i.e. his statements on electrification), but affirmed that only a 'vulgarization of Marxism' could assume a direct relationship between technology and culture. Moreover, the culture which Gastev described was merely a 'culture of muscles', not a 'culture of the mind'; hence it could not encompass proletarian culture.<sup>72</sup>

Yet another aspect of Gastev's heralded culture agitated his critics. According to Bogdanov, Gastev's scheme lent itself to the rise of a new

'social group' of educated engineers who would perform creative, original functions against a background of mass uniformity.<sup>73</sup> Similarly, Kerzhentsev warned that the emphasis placed by *TsIT* on a selected group of workers would lead to 'an aristocracy of the working class, high priests of *NOT*'. At the same time, he rejected the idea of *TsIT* as a self-ordained centre for 'civilizing' workers.<sup>74</sup> If a new man were to be fashioned, he would have to be a 'conscious participant in the production process and in the national economy' rather than an object for laboratory experimentation.<sup>75</sup>

In a sense, Gastev made himself an obvious target for derision. He sought simple, perhaps simplistic, training methods because he was stunned by the difficulty of transforming the peasant into a worker. Accordingly, he chose Robinson Crusoe as 'the patron of the new cultural movement' because the 'new man' should exhibit skill and dexterity under adverse conditions.<sup>76</sup> His call for 'training of character' was elementary and basic: 'if there is no steel, turn to wood. Do not beg, and do not wait'.<sup>77</sup> Ultimately, he was mesmerised, and not he alone by any means, by technology, its promise, and its impact on governing values.

Those who hastened to Gastev's defence drew on Lenin's arguments against proletarian culture, namely, that the proper focus of 'culture workers' was to instil discipline, promote literacy, and eliminate 'pre-bourgeois habits'. Rather than rhapsodizing about an ideal proletarian culture, 'revolutionary tactics' dictated borrowing elements of Western culture. Within this context, *NOT* was above all 'a means for raising culture in general and a method of struggle against remnants and survivals of the peasant, Asiatic culture of old Russia'.<sup>78</sup>

Confronted with the scene of 'uncultured masses', the ideologues could not readily condemn any effort at enlightenment. Indeed, the 'struggle for time' campaign relied on measures which were as rudimentary as any of those advocated by Gastev. Nevertheless, the ideologues pleaded for recognition of the larger goal. It was not simply a question of raising the cultural level—'any bourgeois specialist can expedite this task without communist leadership'—but of building socialism at the same time.<sup>79</sup> For this reason, Taylorism could not be pressed into service in an indiscriminating fashion. If the role of *NOT* in the new culture was to instil the 'necessary habits and customs' for industrialization, it was also to avoid 'external pressure and compulsion'. Hence socialist traits were the necessary concomitant to 'learning to work': 'to work well, to reflect on one's production and ways of improving it, to bear in mind the whole of the plan of socialist construction—all these should become habits'.<sup>80</sup>

Beyond the more facile Marxist exhortations, the ideologues were stymied by the vagueness of what actually constituted 'socialist traits' and how these were best inculcated. Proletarian culture, in either theory or practice, was still very much in its infancy. As a common denominator, both the ideologues and the pragmatists supported a normative order based on technical rationality and collectivism. They welcomed automation, standardization, and rationalization as the antidotes to the alleged anarchy of capitalist society and as signposts of the new socialist order. The result was an uneasy ambiguity towards Taylorism and the cultural values it represented.<sup>81</sup>

### *Conclusion*

It is clear that Taylorism did not elude ideological scrutiny and that a 'communist point of view' was expressed, at times vociferously. It is also clear that the ideologues had little real impact. Their weakness stemmed from the following factors:

1) given Lenin's endorsement of Taylorism, it was politically untenable to reject Taylorism outright. For all practical purposes, modification became the only real choice, thus influencing the terms of the debate.

2) doubts on the feasibility of using 'capitalist means' to build socialism remained unresolved. Although the ideologues did not accept the premise that technology was 'value-free' once removed from its capitalist milieu, they did not provide adequate guidelines on how to excise the 'capitalist elements'.

3) the vision of a rationalized society inspired by general Taylorist concepts was not vividly distinguished from the vision of the new socialist society. This confusion tended to undermine the ideologues' efforts to castigate Taylorism.

In the final analysis, the ideologues suffered from their failure to define clearly the socialist foundations of the scientific organization of labour, with specific reference to production relations and the work process, as well as their reluctance to tie the scientific organization of labour to the larger political and economic structures of the system.

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<sup>1</sup> See Harry Braverman, *Labor and Monopoly Capital* (New York: Monthly Review Press, 1974), Introduction, and Daniel Bell, *End of Ideology* (New York: Free Press, 1962), chap. 15.

<sup>2</sup> Kendall E. Bailes, 'Alexei Gastev and the Soviet Controversy over Taylorism, 1918–24' *Soviet Studies*, vol. XXIX, no. 3 (July 1977), pp. 373–94. For earlier references, see E. H. Carr, *The Bolshevik Revolution, 1917–23*, vol. 2 (London: Macmillan, 1952), pp. 105–20, and *Socialism in One Country, 1924–26*, vol. 1 (London, Macmillan, 1958), chap. 7.

<sup>3</sup> The Presidium of the *Liga Vremya* included P. M. Kerzhentsev (chairman), A. K. Gastev, A. Kaktyn', and Rogachev; Lenin and Trotsky were elected honorary chairmen. (The appearance of Gastev's name on the Presidium suggests an attempt at compromise, which did not prove successful). The enlarged Bureau included Preobrazensky, Meyerhold, Kosarev, Shpil'rein, and Dange. Additional sources of support came from Burdyansky (head of the Kazan' Institute of Labour), Esmansky (head of the Taganrog Institute of Labour), and Shatunovsky (associated with NKPS and Gosplan). Articles written by the ideologues were variously signed, including 'Bureau of Moscow Communists, Workers of NOT' and 'Group of Seventeen'.

<sup>4</sup> The Presidium of *TsIT* consisted of the following members: A. K. Gastev (chairman), L. B. Granovsky, G. A. Berkhovskiy, and M. B. Piolunkovskiy. In addition to Lenin's endorsement, important sources of support came from the Council of Trade Unions, Tomsky, Dzerzhinsky, and Zinoviev.

<sup>5</sup> For a fuller treatment, see Zenovia A. Sochor, 'Modernization and Socialist Transformation: Leninist and Bogdanovite Alternatives of the Cultural Revolution' (unpublished Ph.D. dissertation, Columbia University, 1977), chap. 8.

<sup>6</sup> For an example of this argument, see Bailes, 'Gastev and the Soviet Controversy . . .' *op. cit.*, p. 376, and *Technology and Society under Lenin and Stalin* (Princeton: Princeton University Press, 1978), p. 50.

<sup>7</sup> V. I. Lenin, 'The Taylor System—Man's Enslavement by the Machine', 13 March 1914, *Collected Works*, vol. 20, p. 153. For an unequivocal condemnation, see Lenin, 'Nauchnaya' sistema vyzhmaniya pota', 13 March 1913, *Sochineniya*, 4th ed. (1948) vol. 18: pp. 556–57.

<sup>8</sup> Lenin, 'The Taylor System . . .' *op. cit.*

<sup>9</sup> Lenin, 'Immediate Tasks of the Soviet Government', 28 April 1918, *Selected Works*, One-Volume ed. (New York, 1971), p. 417.

<sup>10</sup> Lenin, 'Kak organizovat sorenvovanie?' 24–27 December 1917, in Lenin, *O literature i iskusstve* (Moscow 1969), p. 399.

<sup>11</sup> A. A. Bogdanov, *Mezhdru chelovekom i mashinoy (o sisteme Teilora)*, (St. Petersburg, 1913).

<sup>12</sup> For summaries of Bogdanov's views, see Alexander Vucinich, *Social Thought in Tsarist Russia: The Quest for a General Science of Society, 1861–1917* (Chicago: University of Chicago Press, 1976), chap. 8, and S. V. Utechin, 'Philosophy and Society: Alexander Bogdanov', in Leopold Labeledz, ed., *Revisionism* (New York: Praeger, 1962), pp. 117–25. The debates between Lenin and Bogdanov are treated more extensively in Sochor, 'Modernization and Socialist Transformation', and are the subject of a forthcoming book by the author.

<sup>13</sup> For brief summaries of the conference, see *Pravda*, 26 and 28 January 1921. Speeches delivered at the conference were published in *Trudy I vserossiiskoi initsiativnoi konferentsii po nauchnoi organizatsii truda i proizvodstva* (Moscow, 1921). Some of the resolutions may be found in P. P. Kovalev et al., *Nauchnaya organizatsiya truda proizvodstva i upravleniya: Sbornik dokumentov i materialov, 1918–30* (Moscow: Ekonomika, 1969).

It is interesting to note that contemporary literature avoids all mention of Trotsky's role in calling this conference. Either Dzerzhinsky, who succeeded Trotsky as head of NKPS, or simply NKPS, is credited with calling the conference. See N. S. Il'enko and K. Sh. Shamsutdinov, eds., *Nauchnaya organizatsiya truda dvadtsatikh godov: Sbornik dokumentov i materialov* (Kazan', 1965), p. 8 or Kovalev, p. 113. In comparison, sources of the 1920s specifically state that Trotsky called the conference. See I. N. Shpil'rein, 'Nauchnaya organizatsiya truda', in *Obshchestvennye nauki SSSR, 1917–27*, ed. V. P. Volgin et al. (Moscow: Rabotnik prosveshcheniya, 1928), p. 62.

<sup>14</sup> Shpil'rein, 'Nauchnaya organizatsiya truda', p. 63. Also see M. Rubinshtein, 'Novye tendentsii sovremennogo teilorizma', *Vestnik truda*, no. 6 (June 1921), pp. 35–39.



<sup>15</sup> Kerzhentsev, *NOT—nauchnaya organizatsiya truda* (1923), reprinted in P. M. Kerzhentsev, *Printsipy organizatsii: Izbrannye proizvedeniya*, ed. I. A. Slepov (Moscow: Ekonomika, 1968), pp. 304–05.

<sup>16</sup> This distinction is made in the general resolution of the conference. See Kovalev, pp. 125–26.

<sup>17</sup> Despite these differences, Lenin expressed approval of both Gastev and Kerzhentsev. He advocated financial assistance for Gastev's Institute, and he praised Kerzhentsev's main work, *Printsipy organizatsii*, as a text worth studying. For Gastev's account of his meeting with Lenin, see *Organizatsiya truda*, no. 1, 1924, p. 11, reprinted in Il'enko and Shamsutdinov, p. 147. For Lenin's comments on Kerzhentsev, see 'Better Fewer, but Better', 2 March 1923, *Selected Works*, p. 705.

<sup>18</sup> 'Organizatsiya truda i upravleniya', *Trud*, no. 29, 6 February 1924, p. 4. The article was signed by Gastev, Gol'tsman, Lavrent'ev, and Kolesnikov.

<sup>19</sup> Gastev, 'Chto takoe NOT?' from Gastev, *Kak nado rabotat'* (Moscow, *VTsSPS*, 1927), reprinted in A. K. Gastev, *Kak nado rabotat'*, N. M. Bakhrakh (ed.) (Moscow: Ekonomika, 1972), pp. 160–61. This passage is typical of Gastev's writing style, i.e. very succinct and staccato-like. His sentences were carefully structured and key phrases were often underlined or offset for visual impact and emphasis.

<sup>20</sup> M. Pjolunkovsky, 'S chego sleduet nachinat' v provedenii v zhizn' organizatsii truda, osnovannoi na nauchnom metode?', *Pravda*, 17 May 1923, p. 4.

<sup>21</sup> Gastev, 'Soyuz i proizvodstvo', *Vestnik truda*, no. 1 (January 1924), pp. 73–74.

<sup>22</sup> 'NOT v Sovetskoj Rossii', *Pravda*, 25 April 1923.

<sup>23</sup> Kerzhentsev, 'NOT v nashikh usloviyakh', *Vestnik truda*, no. 1 (January 1924), pp. 81–83.

<sup>24</sup> 'Nasha platforma v oblasti NOT', *Pravda*, 11 January 1923, p. 2. The article was signed by Kaplun, Torbek, Shpil'rein, Burdyansky, Esmansky, and Shatunovsky.

<sup>25</sup> Kerzhentsev, *NOT*, pp. 283–84.

<sup>26</sup> Kerzhentsev, 'NOT v nashikh usloviyakh'.

<sup>27</sup> G. Torbek, 'Pervaya popytka', *Voprosy truda*, nos. 5–6, 1923, pp. 73–77.

<sup>28</sup> Gastev, et al., 'Organizatsiya truda i upravleniya', *Trud*, no. 28, 5 February 1924, p. 2. The 5 and 6 February issues of *Trud* constituted the 'TsIT platform' prior to the convening of the Second *NOT* Conference in March 1924.

<sup>29</sup> Kerzhentsev, 'Dve platformy po NOT', *Trud*, no. 4, 20 February 1924, p. 2. This was the counterpart to the Gastev-Gol'tsman 'platform' cited above.

<sup>30</sup> I. Kan, 'O klassovom podkhode k probleme nauchnoi organizatsii truda', *Voprosy truda*, no. 4, 1923, pp. 37–39.

<sup>31</sup> 'Platforma Khar'kovskogo Instituta Truda v voprosakh NOT', *Voprosy truda*, no. 4, 1923, pp. 39–40.

<sup>32</sup> The question of normative vs. material incentives was particularly disputed. For a range of views, see Kerzhentsev, 'O tsitovskoi platforme po NOT', *Pravda*, 8 March 1924, p. 7; Gol'tsman, 'O platforme po NOT gruppe 17 kommunistov', *Pravda*, 7 March 1924, p. 4.

<sup>33</sup> Ya. Shatunovsky, 'Molotok ili elektrifikatsiya', *Pravda*, 25 May 1923, p. 1; Ya. Shatunovsky, 'Nauchnaya organizatsiya truda i ee anarkhistskoe vyyavlenie', *Krasnaya nov'*, 1923, no. 6, pp. 53–64.

<sup>34</sup> The ideologues' espousal of 'communist intervention' is at least partly tied to their predominance in the Council of Scientific Management (*Sovnot*) of the Commissariat of Workers' and Peasants' Inspection (*RKI*).

<sup>35</sup> Gastev, 'Soyuz i proizvodstvo', *Vestnik truda*, no. 1 (January 1924), pp. 73–74.

<sup>36</sup> Gastev, 'Strogaya ispolnitel'nost', *Pravda*, 9 April 1924, p. 1.

<sup>37</sup> Gastev, 'Soyuzy i organizatsiya truda', *Trud*, no. 36, 14 February 1924, p. 2.

<sup>38</sup> Despite some criticism of *TsIT* and an attempt at reconciling the 'two platforms', the Second *NOT* Conference essentially came out in favour of the pragmatic approach of *TsIT*.

<sup>39</sup> Gastev, 'Chto takoe nauchnaya organizatsiya truda', *Pravda*, 13 December 1922, p. 5.

<sup>40</sup> Gastev, 'V Tsentral'nom Institute Truda', *Vestnik truda*, no. 1 (January 1924), pp. 85–87.

<sup>41</sup> By 1928, the number of 'control laboratories' included the following: production control (quality control of the product); bio-engineering (control of the 'organizational behaviour' of the student at his work place); psycho-technology; bio-chemistry (to study fatigue); 'functional diagnostics' (to study the 'energy balance' of the organism); and

dispensary (medicinal and anthropometric control). 'Tsentral'nyi Institut Truda', *Revoliutsiya i kul'tura*, no. 2, 1928, pp. 68–69. Interestingly, Yu. A. Gastev (possibly a son) draws a comparison between Gastev's 'programmatic training' and B. F. Skinner's 'linear programmes'. He also claims that the *TsIT* methods were an early prototype of cybernetics. See Yu. A. Gastev, 'O metodologicheskikh voprosakh ratsionalizatsii obucheniya', in *Kibernetika, myshlenie, zhizn'*, ed. A. I. Berg (Moscow: Mysl', 1964), pp. 459–72.

<sup>42</sup> Gastev, 'Novye sily', *Pravda*, 14 July 1923, p. 5. See also Gastev, *Nashi zadachi* (Moscow: Institut truda, 1921), reprinted in *Kak nado rabotat'*, pp. 29–30.

<sup>43</sup> Gastev, 'O nauchnoi organizatsii truda v proizvodstve: Tezisy Tsentral'nogo Instituta Truda', 16 January 1923, in Koval'ev, p. 142.

<sup>44</sup> 'Organizatsiya truda i upravleniya', (6 February).

<sup>45</sup> Following resolutions by the Commissariat of Labour (*Narkomtrud*) and the Central Committee of the Party for accelerated mass training, the numbers went up considerably. In 1926, Gastev reported that 1,000 instructors had been trained, and by 1929, 15,000 workers. See Il'enko and Shamsutdinov, pp. 47, 721–23. During the industrialization drive *TsIT* claimed to have trained half a million workers in all (Gastev, 'Nauchnaya organizatsiya truda', *Organizatsiya truda*, no. 9, 1935, reprinted in Gastev, *Kak nado rabotat'*, p. 371). A breakdown of figures is not available. Between 1921–38, there were 1,700 training stations. During this time, 0.5 million workers were trained in 200 different specializations, and 20,000 'instructors of production' were also trained. A. V. Smetanin (former member of staff of *TsIT*), 'Nauchnaya organizatsiya truda metodom TsITa', *Ekonomicheskaya gazeta*, no. 11, 16 March 1923, pp. 16–18 of special section. The 0.5 million figure is also quoted in *Bol'shaya sovetskaya entsiklopediya* 6 (third ed., 1971), p. 138.

<sup>46</sup> 'Bor'ba za vremya', *Pravda*, 31 July 1923, p. 3. For the expanded charter, see *Pravda*, 5 August 1923, p. 3.

<sup>47</sup> Il'enko and Shamsutdinov, *NOT*, p. 683.

<sup>48</sup> *Ibid.*, p. 15.

<sup>49</sup> L. Pamilla and V. Chukovich, *NOT—velenie vremeni* (Minsk: izd. Belarus', 1973), p. 35.

<sup>50</sup> Kerzhentsev, *Bor'ba za vremya* (Moscow: izd. Krasnaya nov', 1924), reprinted in *Printsipy*, p. 370. Kerzhentsev notes that the first *Vremya* cell originated in the War Academy. See Kerzhentsev, 'Liga Vremya', *Pravda*, 25 July 1923, p. 1.

<sup>51</sup> Kerzhentsev, *NOT*, p. 303. Pamilla and Chukovich substantiate this figure, quoting from archival sources, p. 35.

<sup>52</sup> Koval'ev, p. 97. For league activities in Moscow, see Il'enko and Shamsutdinov, pp. 683–84.

<sup>53</sup> *Ibid.* The downfall of the league was not long in coming. In December 1925, the *RKI* issued a resolution which stated that the league had fulfilled its tasks of agitation and propaganda and was accordingly dissolved. See Il'enko and Shamsutdinov, p. 685. Among other reasons, Kerzhentsev's attempts to maintain 'organizational autonomy' may have proved untenable. Kerzhentsev insisted that the league was neither 'directly a state organ' nor 'organizationally amalgamated with the party,' even though it was in 'an extremely close and friendly association' with the party. He resisted efforts to merge the league with *RKI*, arguing that it was more useful to have various non-governmental organizations to encompass the different strata of the population, similar to the civic organizations in England. Kerzhentsev, *Bor'ba za vremya*, pp. 372–74. Bukharin had also advocated 'voluntary associations' as intermediaries between the government and the individual, and considered the *Liga Vremya* an organization of this 'new type'. See N. I. Bukharin, *O rabkore i sel'kore: Stat'i i rech'i* (Moscow: *Pravda* and *Bednota*, 1926), pp. 14–21.

<sup>54</sup> Kerzhentsev, 'Chasy', *Pravda*, 22 September 1923, p. 3.

<sup>55</sup> For the full range of Kerzhentsev's suggestions, see Kerzhentsev, *Bor'ba za vremya*, pp. 335–82.

<sup>56</sup> *Ibid.*, p. 376.

<sup>57</sup> Kerzhentsev, 'Bor'ba s organizatsionnoi bezgramotnost'yu', *Pravda*, 8 May 1923, p. 1; Kerzhentsev, *Bor'ba za vremya*, pp. 362–65, 379–81. Also see I. Shpil'rein, 'O prakticheskoi rabote Ligi Vremya', *Pravda*, 22 August 1923, p. 5.

<sup>58</sup> Kerzhentsev, *Bor'ba za vremya*, p. 338.

<sup>59</sup> For studies dealing with Taylorism, see Bell, chap. 11, Braverman, and Nicos P. Mouzelis, *Organization and Bureaucracy* (Chicago: Aldine, 1968).

<sup>60</sup> Soviet Taylorism's unique cultural and educative role is discussed in Samuel Lieberstein, 'Technology, Work, and Sociology in the USSR: the NOT Movement', *Technology and Culture*, vol. 16, no. 1 (January 1975), pp. 48–66.

<sup>61</sup> Lenin, 'Immediate Tasks', p. 417. In response to this problem, Lenin offered the following prescription: 'To learn how to work is now the main, the truly national task of the Soviet Republic. Our primary and most important task is to attain universal literacy, but we should in no circumstances limit ourselves to this target. We must at all costs go beyond it and adopt everything that is truly valuable in European and American science.' Lenin made this statement while recommending O. A. Ermansky, *Nauchnaya organizatsiya truda i proizvodstva i sistema Teilora* (Moscow: Gosizdat, 1922) as a 'standard textbook for all trade union schools and for all secondary schools in general'. See Lenin, 'A Fly in the Ointment', 10 September 1922, *Lenin on the United States* (New York, 1970), p. 513.

<sup>62</sup> E. Preobrazhensky, 'Davno pora', *Pravda*, 28 July 1923, p. 1.

<sup>63</sup> N. Krupskaya, 'Sistema Teilora i organizatsiya raboty sovetskikh uchrezhdenii', *Krasnaya Nov'*, vol. 1, 1921, pp. 140–46.

<sup>64</sup> P. Kerzhentsev and A. Leont'ev, *Azbuka leninizma* (Moscow: Gosizdat, 1930), p. 128.

<sup>65</sup> Preobrazhensky, *op. cit.*

<sup>66</sup> Gastev, 'Pod znakom organizatsii', *Pravda*, 13 December 1923, p. 2.

<sup>67</sup> Gastev, *Novaya kul'turnaya ustanovka* (Moscow: VTsSPS–TsIT, 1924), reprinted in *Kak nado rabotat'*, p. 111.

<sup>68</sup> According to a visitor at *TsIT*, 'anyone entering the front door of this institute as a normal living man, issues from the back door after passing through countless laboratories, as a completely perfected, working machine.' The author also notes that the Institute was based on the 'Taylor experimental investigations in America, but with the idea that the new Bolshevik man of the future can be produced here.' Rene Fulop-Miller, *Mind and Face of Bolshevism: An Examination of Cultural Life in Soviet Russia* (New York: Harper & Row, 1965), pp. 210–11.

<sup>69</sup> Gastev, *Novaya kul'turnaya ustanovka*, p. 95.

<sup>70</sup> Gastev, 'O tendentsiyakh proletarskoi kul'tury', *Proletarskaya kul'tura*, nos. 9–10, 1919, pp. 35–45.

<sup>71</sup> Bogdanov, 'O tendentsiyakh proletarskoi kul'tury (ovtet A. Gastevu)', *Proletarskaya kul'tura*, nos. 9–10, 1919, pp. 46–52.

<sup>72</sup> L. L. Averbakh, *Spornye voprosy kul'turnoi revolyutsii* (Moscow: Moskovskii rabochii, 1929), pp. 104–24.

<sup>73</sup> Bogdanov, *op. cit.*

<sup>74</sup> Kerzhentsev, 'Dve platformy po NOT'.

<sup>75</sup> Kerzhentsev, 'Nasha platforma', p. 2. The ideologues claimed that the league was based on 'self-management and self-organization' rather than imposed directives and programmes. See Kerzhentsev, *NOT*, p. 304, and A. Vasil'ev, 'Nashi dostizheniya', *Pravda*, 9 February 1924, p. 7.

<sup>76</sup> Gastev, 'Vosstanie kul'tury', *Pravda*, 3 January 1923, p. 3.

<sup>77</sup> Gastev, 'B'et chas', *Pravda* (no. 122, 3 June 1922), in *Kak nado rabotat'*, p. 40. Gastev seems to have fancied himself as such a 'Robinson Crusoe'. In describing the difficult early years of *TsIT*, he remarked, 'we started to assemble whatever there was by way of incidental equipment and created our own apparatus on the spot'. Il'enko and Shamsutdinov, p. 147.

<sup>78</sup> E. Rozmirovich, 'NOT v perspektive dal'neishego razvitiya revolyutsii (po povodu platformy po NOT gruppy kommunistov)', *Pravda*, 20 and 21 February 1924, pp. 2 and 4 respectively; Rozmirovich, 'Kto zhe zatushevyvaet i kto putayet?' (ovtet t. Kerzhentsevu), *Pravda*, 9 March 1924, p. 4.

<sup>79</sup> Gruppa Sverdlovitsev, 'Neskol'ko spravok t. Rozmirovich', *Pravda*, 24 February 1924, p. 4. Although the Sverdlov group was not aligned with Kerzhentsev's Group of Seventeen, they adopted similar positions.

<sup>80</sup> Kerzhentsev, *Azbuka leninizma*, pp. 127–28. Suggestions for a 'self-help' programme were offered in Kerzhentsev, *Organizui samogo sebya* (1925), a pamphlet reprinted in *Printsipy*, pp. 415–35.

<sup>81</sup> This mixture of hope and fear of Taylorism was also expressed in Europe, with Taylorism appealing to diverse political groups, ranging from the radical right to the radical left. See Charles S. Maier, 'Between Taylorism and Technocracy: European ideologies and the vision of industrial productivity in the 1920's', *Journal of Contemporary History*, vol. 5, no. 2 (1970), pp. 27–61. Also see Gramsci's favourable outlook on Taylorism, Antonio Gramsci, *Selections from the Prison Notebooks*, ed. and trans. Quintin Hoare and Geoffrey Nowell Smith (New York: International Publishers, 1971), pp. 277–318.