

Historical-Critical Dictionary of Marxism

Electrification

A: kahraba. – G: Elektrifizierung. – F: électricification. – R: elektrifikacija. – S: electrificación. – C: dianqihua 电气化

‘Communism is Soviet power plus the electrification of the whole country’. This famous statement of **Lenin**’s, made at the Eighth Congress of Soviets on 22 December 1920 (*LCW* 31, 516), has been widely taken to encapsulate the Soviet approach to industrialisation. Undoubtedly, Lenin’s words were a powerful and impressive slogan; the circumstances of its formulation shed considerable light on the larger issues of Soviet socialism and its project of forced catch-up industrialisation.

1. The potentially revolutionary implications of electricity were already evoked by **Engels**, notably in his remark that it would ‘prove the most powerful of levers in eliminating the antithesis between town and country’ and would thereby give ‘the productive forces... a range such that they will, with increasing rapidity, outstrip the control of the bourgeoisie’ (*MECW* 46, 449).

The intellectual and political context of **Lenin**’s pronouncement was similar. It followed immediately upon an allusion to communism’s ‘internal enemy’, the basis of which he identified in the black market ‘that resides in the heart and behavior of every petty proprietor’ (*LCW* 31, 515). This market was a ‘foundation of capitalism’, and so long as it existed, there was the possibility ‘that the commodity owners and capitalists [would] come back to Russia’ (*ibid.*). Electricity would provide the means to undermine this mentality by placing the entire national economy ‘on a new technical basis, that of modern large-scale

production’ (516). The artificial light provided by electricity – called ‘unnatural light’ by some peasants **Lenin** encountered – would then come to symbolise, according to **Lenin**, the peasants’ political ‘enlightenment’ (517). In a wider context, **Lenin** linked the prospect of electrification to a number of other developments he hoped to encourage. Foremost on his agenda, as he introduced the theme of electrification (513), was the anticipated eclipse of ‘politicians and administrators’ within the Soviets, in favour of ‘engineers and agronomists’. The Civil War having been won, political problems could now recede, to be replaced by economic concerns. While **Lenin** recognises the severity of the economic situation, he proposes a response conceived primarily in technical terms. His language here recalls that of his pre-October projections on the withering away of the state (in *The State and Revolution*; *LCW* 25, 425, 473), as well as **Engels**’s scenario of ‘the government of persons [being] replaced by the administration of things’ (*MECW* 24). It also echoes **Lenin**’s frequent expressions of preference for competent bourgeois engineers over technologically ill-informed Communist officials (e.g., *LCW* 27, 248; *LCW* 32, 144).

Any such evolution away from politics, however, would depend, in turn, upon the eminently political step of institutionalising the planning process. The technical groundwork for this step was laid with the release, at the same Eighth Congress (December 1920), of the *Plan for Electrification of the R.S.F.S.R.*, by GOELRO (State Commission for the Electrification of Russia). **Lenin** reaffirms his endorsement of this plan in a February 1921 *Pravda* article (*LCW* 32, 137–45), where he pointedly criticises ‘the dabbler and the bureaucrat’ who find fault with the planners’

social origins rather than involving themselves in any effort at implementation. He advocates attention to the plan's practical aspects, given that 'GOELRO's is the only integrated economic plan we can hope to have just now' (143).

2. The strategic significance of electrification for Soviet industrialisation is expressed institutionally, in the fact that the State Planning Commission (GOSPLAN) was instituted simultaneously with GOELRO (Bailes 1978, 416), and that electrification was understood as the infrastructure on which the plan would be built up (Carr 1952, 369f). Lenin's slogan about electrification thus prefigured the role that would be assigned generally to industrialisation – a link that was also manifested in the poster-art of the period, especially the work of Gustav Klutsis (Gassner 1992, 316 and Plate 434).

Whether referring specifically to electrification or to overall economic development, however, Lenin's slogan posits a technicist reduction. Comprehending communism as mere addition of Soviet power to electrification undermines the practical-communist elements and driving forces that are necessarily immanent to this process.

The need to transform the production process was at the core of the original Marxian project (see, e.g., Marx's critical discussion of the phenomenon of unskilled labour in *Capital*, Volume I (MECW 35, 355, 361, 369)). The centrality of this concern had declined markedly, however, within the Social-Democratic movements of the early twentieth century. In countries with strong labour-unions, attention shifted from control over the production process to 'bargaining over labor's share in the product' (Braverman 1974, 10). The Bolshevik leadership, for its part, despite having political power, was no better placed than were the labour-unions to challenge established management practices. Its primary concern was the political survival of the revolution, under conditions of relative backwardness, civil war and foreign military intervention. Lenin's approach to industry, consequently, was to rely on already tested methods. He

explicitly endorsed the German model of state-capitalism (LCW 27, 340). In the sphere of large-scale machine production, he called for 'absolute and strict *unity of will*... thousands subordinating their will to the will of one' (LCW 27, 268).

What was lacking in revolutionary mobilisation within the workplace would have to be made up for in some other sphere. For industrialisation as a whole, as for electrification in particular, the revolutionary component would have to be found in the outcome, rather than in the process. Lenin was quite explicit about this in his 1914 discussion of 'scientific management' (Taylorism). He gave an unvarnished description of how this technique impaired the scope and freedom of workers' physical motions, but he concluded that a workers' government could eventually apply the resulting reduction in labour-time to the workers' own benefit (LCW 20, 153). But such accretions of leisure-time were no longer on the agenda in 1918; they gave way, in Lenin's guidelines, to a scenario of unrestricted deliberations that workers could engage in outside of work time – combined, however, 'with *iron* discipline while at work' (LCW 27, 271). The clear priority of workplace rules, combined with the undiminished length of the workday, signalled the dissipation of worker-participation schemes (cf. Sirianni 1982, 140).

3. As traditional – capitalist-authoritarian – patterns of work-relations came to be increasingly reinforced, Communist activists came more and more to identify the building of socialism with the implementation of grand projects to transform both physical surroundings and social life. Implicit in both the electrification-slogan and these other projects was the idea that, thanks to Soviet power, unprecedented human achievements had become possible (cf. Kopp 1975, Rosenberg 1984). This was a frequent theme in the art of the period, dramatically symbolised by the projected Tatlin Tower (Lodder 1993, 18). Perhaps the most extravagant visions were those sketched by Trotsky, who imagined 'peoples' palaces on the peaks of Mont Blanc and at the

bottom of the Atlantic', and predicted that 'the average human type will rise to the heights of an Aristotle, a Goethe, or a Marx. And above this ridge new peaks will rise' (**Trotsky** 1925, 254, 256).

The predisposition towards grand technological visions had a long Marxist trajectory, extending even to a leader such as Rosa **Luxemburg**, who gave far more priority than did the Bolsheviks to concerns for the direct exercise of power by workers. Referring in 1898 to contemporary canal-building projects, she had evoked 'what colossal forces of production lie slumbering in the womb of our society and how progress and culture will thrive once we have cast off the fetters of capitalist enterprise' (**Luxemburg** *GW* 1/1, 283).

In his science-fiction novel *The Red Star* (1908), Alexander **Bogdanov** gave a specifically technological dimension to his vision of a new society. A factory on Mars knew 'neither fumes nor soot nor stench nor dust... here there was no raw violence of fire and steam; and fine and even more powerful power of electricity was the soul of this unusual mechanism' (70). Unusual and previously unused forms of power could be taken from their sources and even transported over long distances. The economic and ecological conditions and consequences under which they were produced could thus more easily be controlled for the sake of the astounding achievements they enabled – be it in production, transport, communication or in the daily activities of individual members of society.

The general Soviet tendency to envisage taking over such forces of production without giving much thought to their transformation was expressed (ironically, in view of official US non-recognition of the Soviet government) in a remarkable admiration for 'America' as a symbol of the future. As US-journalist Dorothy **Thompson** wrote, 'Russia's adoration of the machine exceeds America's because the machine is still very new in Russia and there is a romantic glamour about it' (**Thompson** 1928, 165).

The most authoritative expression of this attitude was **Stalin's** disquisition, in *The Foun-*

dations of Leninism (1924), on 'Styles of Work'. Here, he describes **Lenin** as calling for a combination of 'Russian revolutionary sweep' with 'American efficiency'. **Stalin** characterises the latter as 'that indomitable force which neither knows nor recognizes obstacles; which with its business-like perseverance brushes aside all obstacles; which continues at a task once started until it is finished...; and without which serious constructive work is inconceivable' (*FL*, Section IX).

The logic of **Stalin's** 'combination' – he does not call it a synthesis – resembles that of **Lenin's** electrification-slogan. 'American efficiency' is viewed as an *instrument*, but as one that is ready-made for revolutionary application, with no need to be modified in its character by those who would wield it.

4. If the logic of the electrification-slogan became the exclusive official approach under **Stalin**, it did not yet have that status at the time **Lenin** first proclaimed it. Alternative visions still flourished at all levels of the society, and, to a considerable extent, enjoyed the endorsement of **Lenin** himself. The most notable expression of this counter-tendency was the movement to establish *zapovedniki* or nature-reserves, i.e., territories permanently protected from any form of economic development. The conflict between the advocates of such protection (concentrated in the RSFSR Education-Commissariat) and those (mainly in the Agriculture- and Foreign-Trade Commissariats) who favoured unbridled exploitation of natural resources was a struggle between two radically divergent conceptions of socialism. The developmentalists accused the conservationists of advocating 'science for science's sake' and of being hostile to socialist construction. The conservationists, for their part, charged their critics with ignoring the need to understand virgin-nature as a precondition for assuring that such construction would be carried out rationally (**Weiner** 1988, 2).

Lenin gave steady support to measures for setting aside 'protected areas'. In May 1920, he signed a law establishing in the Volga delta 'the first protected territory anywhere to be created by a government exclusively in the

interests of the scientific study of nature'. A subsequent law, 'On the Protection of Monuments of Nature, Gardens, and Parks' (September 1921), empowered the Education Commissariat (*Narkompros*) to designate future *zapovedniki* (Weiner, 28).

While there is no theoretical incompatibility between promoting electrification and enforcing, by way of exception, certain nature-reserves, it remains true that the two policies reflect antagonistic sets of priorities. What allowed them to coexist during the early Soviet years was, in part, a shared commitment to viewing socialist construction as a project grounded in science. For some, this meant stressing limitless technological possibilities; for others, it meant seeking a new society-wide level of rationality in economic deliberations. Certain visionary leaders – in common, perhaps, with ordinary people – could harbour both aspirations at once; but bureaucratic pressures led to a hardening of positions at the intermediate (administrative) levels that were decisive for implementation.

With the triumph of technological gigantism, embodied in **Stalin's** assumption of power, a dramatic change occurred even in the underlying 'scientific' consensus. Where the whole Marxist tradition, up through **Lenin** and **Trotsky**, had looked to the natural sciences to provide a methodological guide for their understanding of society, under **Stalin**, a curious inversion took place, whereby supposedly natural-scientific investigations now came to be governed by ideology (Löwy 1984, 169). It was this inversion which permitted, on the one hand, the dominance of such pseudo-scientific dicta as those of **Lysenko**, and, on the other, the trampling of any possible restraint upon the destruction of the natural environment. The attack on 'science for science's sake' thus produced empowered non-knowledge. Nature-conservation is not a question of 'research for research's sake... but rather, in order to make this possible – if necessary also against the researcher – nature must first be protected' (Schurig 1995). In the USSR, this insight was neglected, at the price of violent environmental destruction like the poisoning of Lake Baikal or the drying-up of the Aral

Sea. This and countless other cases of environmental damage paled in significance in relation to the nuclear catastrophe of Chernobyl in which the productive force of electricity, enthusiastically greeted at the beginning of Soviet industrialisation, showed its other face as a gigantic destructive force.

5. The economic objectives of the Soviet régime evolved from a position of coexistence with other objectives – whether worker-participation or nature-conservation, or the larger goals of communism – to a position of overriding and almost exclusive concern. The 'Soviet power' evoked in **Lenin's** slogan of 1920 thus relinquished much of what had made it distinctive as a force that could have guided the process of electrification (or industrialisation).

While Soviet power, in its actual exercise, conferred notable economic and educational gains upon major sectors of the population, it sought to make up for any deficiencies in political support by retaining – for both workers and managers – a characteristically capitalist emphasis on individual material incentives (cf. **Novo** 1961, 116, 160).

During the decades of Soviet rule, market forces were to some extent side-stepped for many aspects of economic policy-making. A developmentalist/productivist orientation prevailed, however, from the beginning. Some of its implications were revolutionary in a social sense, but others were more in the tradition – evoked in the *Communist Manifesto* – of capital's 'constant revolutionising of production, ... everlasting uncertainty and agitation'. This aspect of the Soviet project, combined with an increasingly depoliticised individual psychology (the fruit of sustained political repression), assured both an economic and a cultural receptivity to Western slogans of perpetual innovation and progress. Once Soviet power faltered, it had no basis for mobilising resistance to the capitalist juggernaut.

BIBLIOGRAPHY: K.E. BAILES 1978, *Technology and Society under Lenin and Stalin: Origins of the Soviet Technical Intelligentsia, 1917–1941*, Princeton; A. BOGDANOW 1923 [1908], *Der rote Stern*.

Ein utopischer Roman, trans. H. zur Mühlen, Berlin; H. BRAVERMAN 1974, *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century*, New York; E.H. CARR 1952, *The Bolshevik Revolution, 1917–1923*, vol. 2, London; H. GASSNER 1992, 'The Constructivists: Modernism on the Way to Modernization', in *The Great Utopia: The Russian and Soviet Avant-Garde, 1915–1932*, New York; A. KOPP 1975, *Changer la vie, changer la ville*, Paris; LENIN 1970, *Collected Works (LCW)*, Moscow; C. LODDER 1993, 'Lenin's Plan for Monumental Propaganda', in M.C. Brown and B. Taylor (eds.), *Art of the Soviets: Painting, Sculpture and Architecture in a One-Party State, 1917–1992*, Manchester; M. Löwy 1984, 'Stalinist Ideology and Science', in T. Ali (ed.), *The Stalinist Legacy: Its Impact on Twentieth-Century World Politics*, London; R. LUXEMBURG 1970–5, *Gesammelte Werke (GW)*, Berlin/GDR; K. MARX and F. ENGELS 1975–2005, *Marx Engels Collected Works (MECW)*, London; A. NOVE 1961, *The Soviet Economy: An Introduction*, New York; W.G. ROSENBERG (ed.) 1984, *Bolshevik Visions: First Phase of the Cultural Revolution in Soviet Russia*, Ann Arbor; V. SCHURIG 1995, 'Ignorabimus. Nichtwissen als höchste Wissensform in den Biowissenschaften am Beispiel des Naturschutzes', in *Ethik und Sozialwissenschaften. Streitforum für Erörterungskultur*, 6. Jg., H. 4, 515–28; C. SIRIANNI 1982, *Workers Control and Socialist Democracy: The Soviet Experience*, London; J. STALIN 1924, *Foundations of Leninism*, Moscow; D. THOMPSON 1928, *The New Russia*, New York; L. TROTSKY 1925, *Literature and Revolution*, New York; *Trudy GOELRO: Dokumenty i Materialy*, Moscow, 1960; D.R.

WEINER 1988, *Models of Nature: Ecology, Conservation, and Cultural Revolution in Soviet Russia*, Bloomington.

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Apathy in command-administrative socialism, association, Chernobyl, command-administrative system, command-economy, destructive forces, development of productive forces, domination of nature, ecology, energy, enthusiasm, general line, industrial revolution, innovation, labour-process debate, lever (material/ideal), Lysenkoism, nature-conservation, October Revolution, planned economy, primary socialist accumulation, productive forces/relations of production, progress, resources, revolutionary *Realpolitik*, Soviet society, Stalinism, state-monopoly socialism, Taylorism, valorising quantity over quality.

Apathie im befehlsadministrativen Sozialismus, Arbeitsprozess-Debatte, Assoziation, befehlsadministratives System, Befehlswirtschaft, Destruktivkräfte, Energie, Enthusiasmus, Fortschritt, Generallinie, Hebel (materielle/ideelle), industrielle Revolution, Innovation, Lysenkismus, Naturbeherrschung, Naturschutz, Ökologie, Oktoberrevolution, Planwirtschaft, primäre sozialistische Akkumulation, Produktivkräfte/Produktionsverhältnisse, Produktivkraftentwicklung, Ressourcen, revolutionäre Realpolitik, Sowjetische Gesellschaft, staatsmonopolistischer Sozialismus, Stalinismus, Taylorismus, Tschernobyl, Tonnenideologie.