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The Disappearance of Planning in the Plan

Commenting on an infeasible plan means reopening a set of issues which were in the center of heated controversies of those years. In the hectic and tense days of 1928 and the first months of 1929 when the First Five-Year Plan was officially approved, academic and scholarly issues easily turned into ideological and political ones; the political ones very soon became the basis for criminal prosecution; finally, the executioner was brought in to resolve the controversies. An opinion on rates of growth uttered at that time was likely to lead to a degrading trial and prison sentence in 1930, to become "commuted," formally or informally, into a death sentence from 1935 on. Thus the cool re-evaluation by a mathematical economist of the set of figures which was triumphantly presented to the world in April-May 1929 as the text of the plan conjures up not merely specters of the past but burning political issues of the present which the Soviet leadership does not like to face.

At that time many Soviet experts and politicians argued heatedly that the version of the plan as officially adopted was unrealistic. Such was the opinion of Gosplan's majority of specialists, especially the top nonparty men. But Bukharin, Rykov, and Tomsky, Politburo members, claimed the same. They disapproved of the more ambitious "optimal" version of the plan and preferred the more modest, "minimum" (*otpravnoi*) version of it.¹ They also proposed working out a special "two-year plan" for agriculture to straighten things out in this field as the condition for the success of the whole plan.

But it is quite clear that even dedicated and ardent party spokesmen in Gosplan, like Krzhizhanovsky and Strumilin, were aware of the plan's excessive rigidity. They were competent people and could not have missed the point that the whole set of "qualitative indicators" (labor productivity, costs, yields)—the plan, quite officially, rested on those—were impossible targets if simultaneously the rate of accumulation in the national income was to be sharply increased. Perhaps justice should be done to those planners by recalculating the targets of the "minimum" version too, because there is enough evidence to believe that this was the one which the planners really

^{1.} Bukharin, Rykov, and Tomsky voted against the optimum plenum and fought for the "minimum" (says an official source), though formally they abstained. See *Voprosy istorii* KPSS, 1960, no. 4, p. 76. Rykov spoke openly against most of the targets of the optimum version, in *Pravda*, Apr. 6, 1929.

meant. To realize this, it is sufficient to remind the reader that the planners officially presented four conditions under which the tougher version would be possible in subsequent years: (1) five good consecutive crops, (2) more external trade and help than in 1928, (3) a "sharp improvement" in the quality indicators, and (4) a smaller ratio than before of military expenditure in the state's total expenditures.²

Could they seriously have envisaged such serene prospects without smiling? Nobody in Russia would hope for five consecutive good crops. This alone can be taken as proof that Krzhizhanovsky did not mean it seriously. The same is true of such qualitative targets as a 110 percent rise in labor productivity, a 35 percent drop in industrial costs, and a 35 percent improvement of agricultural yields, not to mention the rosy assumptions about international relations which, if they were true, would undermine the very rationale for breakneck speed.

Other glaring inconsistencies were quite visible too, such as stepping up investments steeply and simultaneously promising substantial raises in the standard of living of the masses in only five years. Bazarov, for example, pointed to another source of the plan's infeasibility—lack of cadres—and warned the Presidium of Gosplan, in February 1929: "If you plan simultaneously a series of undertakings on such a gigantic scale without knowing in advance the organizational forms, without having cadres and without knowing what they should be taught, then you get a chaos guaranteed in advance; difficulties will arise which will not only slow down the execution of the program of the *piatiletka*, which will take seven if not ten years to achieve, but results even worse than that may occur: here such a blatantly irrational squandering of means could happen which would discredit the whole idea of industrialization."⁸

We know enough about the history of Soviet industrialization to realize what a brilliant prophecy this was;⁴ but party planners also were subjected to pressures which made them write into the plan figures in which they did not believe. It was Strumilin who told us how his planners finally preferred to "stand for higher tempos rather than sit [in prison] for lower ones,"⁵ and he himself was not very far from "sitting" when he was removed from Gosplan together with Krzhizhanovsky in 1930. It was obviously the politi-

2. G. F. Grin'ko, "Plan velikikh rabot," Planovoe khoziaistvo, 1929, no. 2, pp. 9-10.

3. Quoted from Gosplan Archives in I. Gladkov, Planovoe khoziaistvo, 1935, no. 4, p. 136.

4. See the studies by Naum Jasny, Soviet Industrialization, 1928-1952 (Chicago, 1961), Eugène Zaleski, Planification de la croissance et fluctuations économiques en U.R.S.S., vol. 1: 1918-1932 (Paris, 1962), and Alexander Erlich, "Development Strategy and Planning: The Soviet Experience," in Max F. Millikan, ed., National Economic Planning (New York: National Bureau of Economic Research, 1967).

5. S. G. Strumilin, in Planovoe khoziaistvo, 1929, no. 1, p. 109.

cal pressure from the Politburo which forced the planners to comply. They had to balance out their plan somehow, to make ends meet, and as the targets for output and investment soared they had to be balanced, on paper, by raising the targets for productivity, costs, yields, and placing the resources in rubles "gotten" in this way directly into balance sheets.

There is an illuminating document showing how this was done. V. V. Kuibyshev, the leader of VSNKh at that time, who is credited with introducing "rising curves" into his plans instead of the "dwindling ones" in which his experts believed, wrote the following comment in a letter to his wife, in fall 1928, when his maximalist version of the industrial plan was being prepared: "Here is what worried me yesterday and today: I am unable to tie up the balance, and as I cannot go for contracting the capital outlays—contracting the tempo—there will be no other way but to take upon myself an almost unmanageable task in the realm of lowering costs."⁶

Trying to balance the deeply imbalanced figures, Kuibyshev knew well he heard enough about this from his experts—that he would not get his cost slashes (he eventually must have known that they would climb instead). How did he expect to get resources for his rates and targets without those costs falling?

We don't know what he believed in matters of economics, but we know where he stood politically. He was Stalin's protégé and owed his Politburo post to him. Incidentally, although he, too, was a member of the Politburo, Kuibyshev could not freely propose plans which he believed feasible. Ordzhonikidze, probably an even more impetuous industrializer, and nearer to Stalin at that time, was there to tell him that he did not push hard enough. However upset Kuibyshev was by figures coming from above making nonsense of his laborious calculations, he was not ready to fight back vigorously enough. To do so would have meant, in fact, to lend support to Rykov, the political enemy of that period.⁷ Instead, by that time, at least in public, Kuibyshev was developing themes about tempos which amounted to the end of the whole five-year plan.

Subsequent events attest the lack of realism of the plan's figures. When at the beginning of 1933 the government announced the fulfillment of the First Five-Year Plan in four years and three months, even its own figures contradicted the claim. Industry, so ran the claim, reached 93.7 percent of the planned target—which would have been superb. But not only was this figure not reliable, it was also meaningless. The plan had other targets too—

^{6.} G. V. Kuibysheva et al., V. V. Kuibyshev: Biografiia (Moscow, 1966).

^{7.} For the trouble Ordzhonikidze kept creating for Kuibyshev see S. N. Ikonnikov, Sozdanie i deiatel'nost' ob''edinennykh organov TsKK-RKI v 1923-1934 gg. (Moscow, 1971), p. 344; and about more trouble, after Ordzhonikidze attacked VSNKh during the Sixteenth Congress, see Kuibysheva et al., V. V. Kuibyshev, pp. 299-300.

for national income, transportation, building, investments, agriculture, costs, real wages, and consumption. And in all these essentials, and many others, the results were a big failure in terms of the plan. To mention only costs, for the trouble they caused to the conscientious Kuibyshev, they went up instead of falling by the planned 35 percent. Productivity of labor rose officially by 41 percent instead of 110 percent, real wages fell instead of the promised rise of 69 percent, agriculture for a time was reduced to a shambles, and the costs of the whole operation went up beyond any expectation. Although 22 billion rubles were to be invested in industry, transportation, and building, 41.6 billion were spent. Not unexpectedly, the money in circulation, which was supposed to grow by only 1.25 billion rubles, had swollen by 5.7 billion rubles in 1933.⁸

There is no ambiguity in this verdict on the results, even when only official figures are used. But there is a second aspect to this problem: in fact, the text of the Five-Year Plan was shelved almost as soon as it was adopted. The control figures compiled for 1929/30 marked the definitive divorce from the perspective framework. By adopting such figures as 17 million tons of pig iron for 1933 (instead of the proposed 10 million), or the new target of 32 percent of industrial growth in 1930, by stepping up the previously anticipated figure of investments by additional staggering amounts, to mention but a few of the new objectives, whatever coherence and consistency the old plan might have had was disrupted. The wholesale collectivization of the peasants which was decreed at the time of launching those control figures was followed by Molotov's frank declaration that, in this field, talking about five-year plans was nonsense.⁹

The planners were by now in a state of complete disarray. The five-year plan—the indispensable framework without which they did not know how to compile their yearly figures—was dead. This was frankly stated by one of the top planners in February 1930. There is talk, he said, about such figures as 17–20 million tons of pig iron, 120–150 million tons of coal (instead of 75 million), or 450,000 tractors (instead of 55,000) for the last year of the quinquennium. The planners had, of course, to accept the figures prescribed when preparing their blueprint for 1929/30, but—said the planners—"insofar as these targets were not always consistent among themselves, insofar as they were not put together in a unified, national-economic program, we were facing extremely great difficulties in considering these directives of party and government during the preparation of control figures for the year 1929/30." But then new control figures had to be prepared for 1930/

8. V. I. Kuz'min, Istoricheskii opyt sovetskoi industrializatsii (Moscow, 1969), pp. 71-72.

9. Talking about five-year plans in agriculture now is a "useless affair," said Molotov, *Bol'shevik*, 1929, no. 22, p. 22.

31. "What happens now to the *piatiletka*?" Something at least roughly resembling a five-year framework had to be quickly compiled, only internally, "for us," so as to have something to be guided by.¹⁰ But a new plan would never be compiled. Not only because two years were needed to prepare a *piatiletka*, but because the leadership did not believe in this any more.

The main motive now became speed. The "tempos decide everything" slogan was more than just a slogan; it was policy. Plans were here to be over-fulfilled, and targets (whatever they were) became not really targets but challenges. The overwhelming majority of planners did not believe in such an approach. They probably viewed the whole drumbeating planning with bewilderment. This was why the old Gosplan, "with all its old-fashioned planners," was swept away, as Molotov proudly asserted to the December 1929 Central Committee Plenum; and, he said, "we are now founding a new Gosplan,"¹¹ which would exclude Krzhizhanovsky, Strumilin, and other party men.

With the shelving of the First Five-Year Plan, only yearly figures remained as valid blueprints for economic activities, and the even-thinner volumes presented later as *piatiletki* were no more than a façade, as Naum Jasny put it. In fact, as "Bacchanalian planning" took over with targets like 45 percent a year for industrial output, and since the five-year plan had been declared finished in four, it was a meaningless operation, indeed, to return at the end of the period, with a touch of modesty, to the deceased old text (prepared "by wreckers") and to claim a seemingly honorable underfulfillment. This procedure was devised in order to gloss over what the *piatiletka* years really looked like.

It is true that those years presented a sight which was extolled by many —a huge country transformed quite suddenly into an impressive building site. But it would be a distortion to leave things at that, since those were also years of a national catastrophe of major proportions—of a "severe disruption of economic life," to use the more careful wording of a Soviet author.¹² Agriculture was utterly disorganized and huge rural areas plunged into a severe famine; there were inflation, black markets, and a drop in the nation's standard of living, unheard of in conditions of peace. The whole social fabric was shattered, and to keep the kettle from blowing up, the powers of dictatorship were enhanced to an extent which probably could match the extremes of the civil war period. Mass coercion, a set of terroristic laws, persecution of whole categories of the population, fake trials, mass shootings, a witch hunt, swept the country. For the first time, still several years before the Great Purge, dozens

10. V. A. Levin, Planovoe khoziaistvo, 1930, no. 2, p. 32.

11. Bol'shevik, 1931, no. 3, p. 24.

12. S. P. Pervushin, in V. G. Venzher et al., Proizvodstvo, nakoplenie, potreblenie (Moscow, 1965), p. 20.

of top government officials, party members themselves, were shot for alleged sabotage.

It was clear that things on the economic front were out of hand. To save the situation the device of "shock-construction-sites" was resorted to—a list of top priority constructions to be taken care of, with all the rest left to their own devices, in an effort to clear the investment jam and to make the frozen resources move. But so much was invested that even more was needed to keep the pace, and toward the end of the quinquennium a dearth of investment means was added to the strains of a crisis-ridden economy.

Overinvestment and overexpansion of the industrial construction frontthese were the traits of industrialization conceived as a rush. Economists, managers, and party people were certainly unanimous about the diagnosis of the disease: because too many means were glutted in the stroiki, they failed to supply in time the indispensable returns to the economy. Haste in such matters, ironically, slowed down development. New enterprises cost much more than expected and emerged with painful slowness. The government, trying to embrace too much in almost all spheres of the economy at one stroke, was saddled with functions it was utterly unprepared to handle. It was not ready to cope with the task of running agriculture with its numerous and inept kolkhozes and sovkhozes, and it had no way of replacing the private merchants and artisans it suddenly evicted or discouraged. "Commercial deserts," to quote a Soviet source, were the penalty for such policies. It was incapable of tackling competently the huge labor force now expanding by additional millions, well above anything anticipated. As disproportions caused emergencies, and bottlenecks endangered the whole structure, the government, presiding over this sort of chaos, resorted to levers it best knew how to apply. When the economic process threatened to get entirely out of control, and masses of peasants and workers roamed the country in search of better conditions, thereby wrecking productivity and raising costs, the "extraeconomic" factors came forcibly to the fore.

These "extraeconomic" factors have to be stressed. Without them the Soviet industrialization drive cannot be understood. But they also explain the character of the political system which emerged in the process. The key factors here are, once more, those impossible targets and haste. They made any planning impossible too. It was the unplanned character of the whole process which forced upon the state ever more "planning," meaning simply the need to enlarge the scope of administrative controls, and the takeover of the whole of the national economy by state apparatuses. The more bottlenecks and crisis areas that appeared, the greater the urge to close loopholes by putting the hand on more levers. In other words, this is the process through which a fully nationalized "command economy" emerged—and in a short span of time—with internal mechanisms pushing to a very centralized pyramid-shaped power structure. Economic and other factors at work were inextricably enmeshed and contributed also in the shaping of the political system. Economic administrations, ministries, and supply agencies were not all that was needed. Strong incentives had to be discovered to make people fulfill their tasks, and such incentives are not easily improvised. A search for them continued, and they are still a great problem today. In the meantime a new stratification policy had to be enacted, and exhortation-cum-coercion had to make good what other stimuli failed to produce.

Party leaders contended that they were quite legitimately resorting to tools from an ideologically consecrated arsenal. It was always fashionable among party politicians to boast of their capacity to employ a blend of "persuasion and coercion" as token of political wisdom. But in the reality of those years even ideological exhortation and appeal to the spirit of self-sacrifice and patriotism tended to take on terroristic forms. In addition, the fewer results exhortation yielded, the more reliance was put on coercion, mass terror, and the swelling "punitive organs." It becomes clear by now that the abrupt suppression of the NEP and the concomitant severe curtailment of the market economy caused a great increase in the state's direct economic responsibility. The larger its scope, the larger the scope of "extraeconomic" tools the state used. The party was unable to find the correct mixture of "persuasion and coercion." The balance was certainly-and suddenly-disturbed. In a situation where forced labor and an economic empire of the secret police based on it were growing, where workers were disciplined by allowing administrations to deprive them of food rations or throw them out of factory dwellings, where khozraschet became a business of procurators and criminal prosecutions, the party itself could no longer remain the same political agency it had been and still claimed to be. In fact, it became totally transformed, together with the whole political system. We stress this fact, because the change occurred precisely during the few years of the so-called Five-Year Plan. The new state system which emerged in Russia in those years became the most important product of the *piatiletka*, more important even than economic planning itself. It had entirely changed its leadership structure; it discarded a mixed economy and replaced it with a "command economy"; it imposed cultural uniformity on what previously had been and still was a plurality of cultures; it eliminated all political and ideological activity from the ruling party and changed it into a sui generis politico-administrative bureaucracy; it introduced coercion on a scale that made the term "police state" applicable. This is why it is essential to talk about the five-year plan not only in terms of rate of growth but in terms of political system-building as well.

We can now turn to the question "Why?" which Professor Hunter asks

after having shown the overoptimistic character of the plan's targets. He lists several factors which could account for the sudden drive to achieve the impossible. All are illuminating—and one can do no more than elaborate on his arguments. The reason why scholars keep returning to the same question is that the state of the sources does not yet allow for definitive answers. We do not know enough, from internal sources, about the state of mind of the leaders, their arguments and considerations, held in private or among themselves in secret meetings.

Nevertheless, what is already known allows some advance in solving our riddle. One thing is clear: only part of the decisions and actions were "strategy" or decisions made with some degree of interrelation between moves and anticipated results. Much was also pure—sometimes bewildered—improvisation, in reaction to unexpected consequences of reasonable steps and sheer blunders. All this still awaits a further detailed history of the period. But a better insight can be gained if we replace our question with two, and ask first "Why did they accelerate?" and next "Why the supertempos?" This way we will better distinguish between two separate stages, the first beginning in 1926 and continuing through part of 1928, and the next extending from sometime in 1928 until the summer of 1929, when a new stage ended in those farreaching decisions about which we are inquiring.

The decision to take more firmly to the road of industrialization resulted from progress accomplished in the NEP years. Agriculture and industry were nearing prewar capacities, and it was obvious to all factions in the party that the "restoration period" was ending and a new era had to begin. What the new policy should be was at the center of the intraparty debate (nonparty experts contributed to it substantially), and the heat of the debate grew as two big snags became apparent: one was the "goods famine" (shortage of industrial goods); the second was the relatively weak marketability of the predominantly small peasant farms. Preobrazhensky was the man who quite precisely prophesied that this situation would soon lead to a crisis, which would be all the more acute the longer the industrial capacities remained inadequate to match the needs.¹³ More investment was going into industry from 1926 on, and the new orientations in this and other crucial spheres were epitomized by the decisions of the Fifteenth Congress, which responded in fact-whatever the actual fate of this or other opposition in the intraparty struggle-to the demands of everybody. Decisions to launch a five-year plan, to engage in the serious work of creating kolkhozes, to do so with all the necessary precautions and brakes applied, and specifically in the framework of the NEP, expressed

13. For Preobrazhensky's forecast of a nearing crisis similar to the one of autumn 1923 see *Bol'shevik*, 1927, no. 6, p. 61, written in March 1927. But he had been analyzing and anticipating this kind of difficulty in exchanges with the peasants since his "Economic Notes," *Pravda*, Dec. 5, 1925.

the existing wisdom of the main Politburo groups inside the party. Or so it looked.

But what took place soon after the congress—we refer to the grain crisis of 1927/28—triggered the chain of events which made the year 1928 a real turning point in Soviet history. During that year Stalin's faction gained full domination inside the party, whereas the crisis phenomena engendered by the acceleration spurred them to launch the all-out drive of 1929.

In order to understand better the events of 1928, three factors should be singled out. First, industry still benefited from unused capacities inherited from the old regime and kept rushing ahead by impressive percentage figures. Second, agriculture, too, was still moving forward, mainly in cattle-raising and technical crops, although not in grain production; and food and money reserves in the hands of peasants improved during the last NEP years. But agriculture suffered from unfavorable terms of exchange with industry. Third, the party, then in the throes of an intraparty struggle with the Bukharin faction—partly in response to external factors, partly according to its internal dynamics—was undergoing important internal changes.

The grain crisis of winter and spring 1928 brought the leadership to a new crossroad. Inside the party, once more, all protagonists knew that a turning point of tremendous importance was nearing. Trotsky, in Alma-Ata, recommended an "offensive" against hostile class forces, especially in the countryside, and he was not displeased by the left turn Stalin was just taking in the direction of precisely some sort of offensive. Trotsky did not yet see what this turn might lead to, but Bukharin already realized that Stalin's faction was considering plans of quite a new dimension. Trotsky, in fact, came to the same conclusion very soon and declared that he had in mind nothing that ruthless.¹⁴ The Bukharinites by then had changed not a few of their ideas on industrialization, accumulation methods, and so forth. A serious effort in the field of investment in industry, with the appropriate tightening up of the screws, was accepted by them. But their effort concentrated on avoiding a strategy of "military-feudal exploitation of the peasantry" and industrial tempos of "madmen" which would lead to a policy exclusively based on "extraordinary mea sures"-namely, mass coercion. These are some of the accusations they launched against the majority group.

While Stalin was fighting these "agents of kulaks," his ideas emerged and crystallized during this same crucial year, including all the elements which would soon merge into a full-fledged new strategy. He adopted the "tribute" argument (tribute to be exacted from peasants), launched his famous "catch

^{14.} Trotsky recommended "an offensive" in "What Now?" (July 12, 1928), *Third* International After Lenin (New York, 1957); but he advised his followers in August 1928 that he did not mean at all the same thing that Stalin was doing. This is discussed in Isaac Deutscher, *The Prophet Unarmed* (London and New York, 1959), p. 447.

up and overtake" slogan as a leitmotiv for industrialization policies, and announced another of his "firsts" of that year, saying that the class struggle would grow fiercer as socialism was winning. To illustrate his point, he initiated (or let be initiated) the first of the big sabotage trials, against the Shakhty engineers, which was to become the trademark of Stalinist policies. Two other themes appeared at the same time: the appeal to launch an offensive against all the "capitalist classes," and a new reliance on kolkhozes and sovkhozes as basic prescriptions for solving the agricultural tangle—though there was yet no sign that the medicine was to be applied all at once. These points, and a few more which we will soon mention, were the key pieces of Stalin's new program. It was so different from what they understood to have been the spirit of the Fifteenth Congress that the Bukharinites could rightly conclude that the leading group was going to shed the NEP framework.

This is a crucial point. As long as Stalin's group did not make up their mind about the fate of the NEP, the new big drive was not ready. But it was maturing, as a combination of successes and failures of those days sharpened the situation and the issues in debate. Force applied to extract grain in 1928 gave a measure of success, but boded ill for the results of the next agricultural and procurement campaign; and rationing was going to be introduced very soon to meet the food-supply stringencies. "Extraordinary measures" in grain procurement had the capacity to help prophecies come true about the limitations inherent in the family-run agriculture, with its natural antipathy to low grain prices and high industrial ones. Temporary coercive measures would soon become permanent, and Stalin did say in the Central Committee that he was ready for such a course. But this was incompatible with NEP and, in any case, seemed more appropriate for a total change of rural structures than to the exacting, year-after-year drudgery of extracting grain quotas from 25 million homesteads.

Another new argument appeared to back up the need for a deep overhaul of the rural world: the country "cannot march on two different legs," a socialist industry and a nonsocialist agriculture. This formula meant a divorce from Lenin's "Better fewer but better." Toward the summer of 1929 this idea was to become a firm conviction and a guide for decisive action. And it harmonized with another one dealing with the debate on industrial growth. The "productivity first" approach—meaning industrial growth first, socialist measures in the countryside next (an idea which was widely shared in the party and among "bourgeois specialists")—was now declared a "kulak" idea. A different course, Bazarov warned—and Rykov fully agreed—would mean mass coercion and economic disaster. But the leaders who now took full control of the party and state differed from other leaders on precisely these points. "Revolutionary force" was nothing new for any Bolshevik, but it had to serve the purpose of advancing socialism; and this last formula introduced restraints in the thinking of some of them.

The majority of the leaders were committed to state action as their main tool, on military lines, and were therefore ready to use as much force as necessary, ignoring checks and restraining devices. The responsibility was now fully in the hands of Stalin and the people he was ready to work with, and the accumulating difficulties convinced them of the uselessness of the NEP framework. The elimination of the last opposition in the name of "monolithism" itself not exactly a traditional party term—removed the last obstacle. Readiness to use massive force could be justified, for the Stalinists too, only in terms of socialist transformations. But the ideological and analytical sophistication of these leaders was not too high. Kolkhozes and sovkhozes looked to them very much like the structures which obtained in industry, with the additional advantage of promising a tamed peasantry and a more productive agriculture.

This was a group of tough ex-civil war leaders, mainly action-oriented bosses, and they probably were quite impatient with theories and scruples. They now looked at the reports on results of the economic year 1928/29 which piled up on their desks in the summer of 1929, and could easily see that industrial growth was impressive but productivity of labor was lagging and costs were going up, and that agriculture was not going to deliver its goods if the procurement went on by force and without economic incentives. It was not difficult to conclude that if very decisive changes in the countryside did not take place during the winter and spring of 1930, the industrial growth of the country would stop by 1931.

Such seems to have been the reasoning. There was enough power to eliminate, brutally if necessary, any other way of viewing things. In the summer of 1929 the rightists were silenced for all practical purposes, and the leadership was now ready to attack simultaneously both weak links in the economic and social setting: the insufficient industrial basis and the insufficiently productive and socially unreliable agriculture. A massive influx of investments into the first and a massive collectivization of the second were the two bold decisions. In these conditions not only NEP had to go but also the original Five-Year Plan, which was based—it is worth stressing—on the premise of the continuing existence of private sectors.

It may be added that the fight against Bukharin's group certainly pushed the majority to formulate aims and methods leaning to the extreme opposite pole. This is the normal "logic" of a fierce factional fight. But the genuine belief that the new strategy actually would work, if decisively and boldly applied, combined with a sort of utopian mood quite understandable in such circumstances were also factors necessary to understand the new strategy. Metal, machinery, fuel, kolkhozes and sovkhozes—this seemed a clear, relatively simple program based on the "leading links" approach. They had the power to haul the whole chain (an instance of metaphoric thinking tending to replace some harder reasoning), and it was worth launching an all-out offensive if it held the promise of quick benefits for a higher, more productive social system: socialism.

The turmoil and results of the First Five-Year Plan were on everybody's minds during the years 1933 and 1934, when a kind of lull was declared and a tenuous fight went on, mainly behind the scenes, for the strategies to be adopted next. All the protagonists of the pre-drive debate were still alive (though some were in prison), and they were free to draw their conclusions at least for themselves, if not openly. Surveying the events of 1928–33 the critics felt that their warnings had been vindicated and what they had feared had come about. To be sure, those who opposed any acceleration of industrial growth—there were some—would have to admit that an impressive industrial development had taken place, and that this was not only possible but highly desirable. By now Hitler was in power in Germany, and national defense needs appeared quite clearly and dramatically to everyone.

But what about the "supertempos" attempted from the end of 1929 on? Bukharin clamored in 1928 against the "madmen" who suddenly wanted to double the already speedy rate of growth. So did many economists. And the outcome, for everyone to see, testified to the unsoundness-in fact, collapse-of the tempo-pathology and the thoughtless speed. The official figures tell us that industrial output grew in 1928/29 by 20 percent, somewhat below the planned mark, and this result was taken as justification to go for 32 percent the next year-but only 22 percent could be attained. For 1931 the percentage was 20 instead of the incredible 45, and in 1932 it was 15 instead of 36 percent. In 1933, a year which was to be the last of the original Five-Year Plan, the percentage was 5 (compared with the modest 16.5 percent of the control figures¹⁵), though according to Jasny there was no growth at all. The official figures are not sufficiently reliable. They certainly fail, for instance, to account for the deterioration in the quality of the products which at times reached alarming proportions. But it is even more important to note that industry was not all there was in the plan. If figures for transportation and power plants are added, and when agriculture is considered with its drop of production and loss of cattle, the overall results certainly did not warrant wild jubilation-not to mention the enormous

^{15.} The figures are from Narodnoe khoziaistvo SSSR v 1970 g. (Moscow, 1971), p. 131; E. P. Gorbunov, Sotsialisticheskaia industrializatsiia SSSR i ee burzhuaznye kritiki (Moscow, 1962), p. 37, and S. P. Pervushin, in Venzher, Proizvodstvo, nakoplenie, potreblenie, p. 20.

waste, which Bazarov predicted, and the grave problem of the cost of the whole operation. Bukharin, Rykov, and Tomsky, who pressed for the more modest "minimum" version, could claim that their approach was fully vindicated by events.

The debate on "dwindling curves" could also be said to have been settled by events in favor of the much maligned planners, especially when longer-term results are considered. All of them, up to August 1928, kept turning out plans with dwindling curves of investment and growth. Soon only the opposite view was allowed to exist, and it reached its apogee with Kuibyshev's announcement before the Sixteenth Party Congress that the target was "doubling from year to year the investments in capital construction, and reaching 30 percent of output growth every year."¹⁶ Most of the experts involved sensed correctly the limits of such growth, whatever the pressures and efforts deployed, and the results of just the first five years amply vindicated them. The underlying economic realities and limitations find an ever-clearer expression in today's official figures for the three five-year plans: 19.2 percent for the first, 17.1 percent for the second, 13.2 percent for the three-and-a-half years of the third. This was a dwindling curve indeed. The opponents were right, and they had to be punished.

The average for the years 1930-40 is worth retaining. It was officially 16.5 percent,¹⁷ certainly an impressive figure (and not much less impressive even if Professor Donald Hodgman's 14 percent is preferred). But a question comes to mind. If the government had listened to its experts and minority leaders and agreed to aim at some 20-22 percent at the beginning, letting it drop over the years so that the average would oscillate around 16 percent (these certainly were figures acceptable to many of the discussants), what would the debate have been like in those years? We remember that the Politburo minority called for fixing more balanced targets—instead of doubling them—against a majority in the leadership who wanted precisely to double the efforts and were ready to silence any other view.

16. Quoted from Saratovskaia partiinaia organizatsiia v period nastupleniia sotsialisma po vsemu frontu (Saratov, 1961), p. 155. Bukharin's critique against "madmen" who dream of doubling the tempos is quoted by Bogushevsky in God vosemnadsatyi: Almanakh vos'moi (1935), p. 473.

It may be worth quoting Rykov's opinion on tempos and investment, which he put forward to the November 1928 plenum of the Central Committee: "One should not think that there is some law for the whole transition period according to which tempos must constantly grow, or at least be kept steady from year to year." The demand to increase industrial investments every year is no more than "naked arithmetic" (golaia aritmetika), which is economically unfounded; it is quite plausible "to lower the curve of investments," and in any case, "it is by no means permissible to make a fetish out of tempos." Quoted from Party Archives—disapprovingly of course—by F. M. Vaganov, Pravyi uklon v VKP(b) i ego razgrom (1928–1930) (Moscow, 1970), pp. 97–98.

17. These figures are from Gorbunov, Sotsialisticheskaia industrializatsiia, p. 37.

The rights and wrongs in the respective positions on kolkhozes are more difficult to assess, because hindsight offers only half of the answer. The catastrophic results of forced collectivization can be taken as vindicating the views of those who opposed such a course. After a period of falling output, agriculture began to recover somewhat, but not enough to convince anyone that the shattering experience was worthwhile. Before the war nothing more than the level of the NEP period was reached for gross agricultural output, and the animal foodstuffs still did not match even the 1916 level. But some 20 million more people had to be fed compared to 1928, and even more compared to 1916.

Such considerations alone did not tell the whole story. The stagnating agriculture, though it kept providing labor for industry, was nevertheless weighing heavily on the economic development of the country. One has only to think about the loss in terms of foregone growth of national income through the failure of agriculture to contribute an adequate part to such growth; or to consider the resources which had to be diverted from industrial uses and poured, in emergency, into agriculture to replace the slaughtered horses; or else the damage to productivity of labor because of queues, weakened labor discipline, and an immense labor turnover-all caused to a great degree by food and goods shortages. The critics and skeptics had therefore enough ammunition with which to charge. But the belief that privately run agriculture, with the support of a sector of cooperatives and some sovkhozes, would still allow for the same 16 percent of growth is more difficult to prove, simply because such agriculture was not allowed to exist. The decisive proof which only events can offer is missing, and the answers can only be hypothetical.

Professor Hunter, reflecting on the whole economic performance, believes that alternative paths existed and that the same, if not better, results could have been achieved "with far less turbulence, waste, destruction, and sacrifice." But he does not specifically speak about agriculture, and a few words can be added to sustain his opinion in that sector too.

It is obvious that the countryside would have had much more food in its barns if the cattle had survived. The problem is whether it would have been willing to offer that food for sale. The government had a problem here, but the same approach of "better less . . ." was equally preferable. The government still would have needed to search for forms of larger and moreproductive units—besides helping the family-farmers to improve their methods—and here less haste and somewhat more time for trial and error could have yielded good results. More diversified forms of cooperative undertakings, including kolkhozes, sovkhozes, tractor stations, both state-operated and cooperative (and especially much less at a time of each of them), would certainly have secured a greater measure of success to these forms. It would have been easier to supply them with good managers, capital, and technicians. It would have been a much more manageable task for these people—peasants and organizers from the cities—to operate smaller units and to take their time to learn the job. As a result, good grain would soon have come from them to help out the government.

One could also envisage a larger-scale operation of collectivization—but never of a wholesale character—in which only the extensive grain production was collectivized and mechanized, leaving the cattle in the hands of the families. There were enough chances for a program of this, more limited, character to succeed and prove beneficial to both branches—grain and stock and therefore convince the peasants. In such a case the experience could snowball, and no amount of "kulak agitation" would stop the movement.

On the other hand, regarding the period of search for new forms, the dangers of a full "supply strike" are often exaggerated. It is not proven that peasants in Russia really could withdraw into a "natural economy" for a long period. Nothing diminished the power of government to tax in order to generate a need for cash, and nothing diminished the desire of peasants to acquire industrial goods. The government had only to moderate its industrializing zeal and to stick, at least, to its initial plans in order to find more resources for the countryside. It also had to be more realistic about what agriculture had to do and could do. It was an aberration to claim that agriculture had to develop at the same pace as industry. If the leaders had sought some modest 3 percent of growth per year, which would have made all things manageable-with or without any rationing-the drive to collectivize en masse, and to compromise thereby both output and the very idea of collectivization, would have been less urgent. In an emergency, for a few years if necessary, who could doubt the capacity of the Soviet government to reimpose a tax-in-kind on the richer producer? Didn't it prove powerful enough to do much more and much worse?

This leads us to another theme in the debate which loomed large in the background—namely, the very essence of the system that would result from these or other policies. All participants realized either dimly or quite clearly the link between industrialization—in town and countryside—and the institutional setting to emerge in this process. Bukharin was especially alert to this problem, and this alertness was epitomized in his fight against the building of socialism through "extraordinary measures," meaning mass terror. He insistently opposed the idea of a "third revolution" in regard to the peasantry, and echoed the same theme that appears in the last of Lenin's writings. His idea that peasants were not a "capitalist class" implied that he denied the justification of an onslaught against the peasants through the ideological consecration of an "anti-capitalist" (hence "socialist") revolution. This is how the "big drive" was presented, claiming the great honor of being more important than the October Revolution. In this regard, the test of historical experience is clear. Stalin's antipeasant drive was an attack against the popular masses. It required coercion on such a large scale that the whole state had to be transformed into a huge, oppressive machine.

The first *piatiletka* period had, as is obvious, a tremendous impact on the fate of Russia. Especially interesting is the interrelation between the methods of industrializing and the character of the political system. It is amusing to read Stalin's words, in May 1928, deriding those who wanted to plan "everything and anything" (use i usia) before conditions were right. But soon his government was doing precisely that: engaging in a rapidly growing amount of planning-or rather, as we prefer to say, administering. During the first quinquennium all the essentials of the system for running the economy were ready; and the methods which evolved could only be considered what Soviet economists today call "administrative methods," and which persisted, at least until the early fifties. During this period the system, as Czesław Bobrowski, the Polish economist, put it, learned better the art of controlling the masses than the art of managing efficiently its resources,¹⁸ including human resources. It was the "overextension" and "overambitiousness" of the initial period which accounted, to a large degree, for the fact that the economy was "administered" but not really "planned."

Too much power, unlimited and unchecked, in the hands of the state leadership is the other side of the coin. It permitted the very existenceand persistence-of the pattern. The state could nationalize as much as it wanted and remove private and cooperative elements at will. It could decide to put to the task as many officials as it felt it needed, and to allocate resources and impose its will on economic agents-all state employees. By so doing it engaged itself in an enormous task of running, directly and in detail, the whole economy, including many spheres it had not previously taken over. Economy became the central effort, and methods applied there spilled over into all other walks of life, since it was the same central apparatus and the same leadership dealing with economy and culture alike. The state, and this leadership, had by now so much to control that it had to adapt itself to this task and build an appropriate machinery, in which "repressive organs" loomed very large. Such a setting became a pattern, and soon any attempt to weaken such controls or the scope of centralized power became lèsemajesté.

18. Czesław Bobrowski, U źródeł planowania socjalistycznego: Analiza doświadczeń radzieckich (Warsaw, 1967), p. 157.

Disappearance of Planning in the Plan

Such a course of hardening the practices of the initial drive into the regular functions of a leviathan state was mightily helped by the absence of any countervailing forces, the last vestiges of which disappeared with the last opposition. In this situation no noticeable influence of planners and economists could be tolerated. The existence of a long-term economic plan, with its internal consistency, coordination of ends and means, and balanced structure, could not be acceptable to a despotic government. It would have become a very serious check on the leadership. It is not astonishing that the science of economics went into a quarter-century period of decay, for it was not needed under these conditions.

The first plan had thus produced a kind of self-perpetuating mechanism in which uncoordinated and quite arbitrary economic targets served to enlarge the scope of "planning." The larger the scope of such state intervention, the greater the power of the state. When in the late fifties and early sixties, in a considerably changed climate, economists were asked to come forth and propose remedies for the troubles of the economy, they discovered the whole range of amazing dysfunctions and imbalances—including the capacity of the government not only to build but also to wreck and squander with which the first *piatiletka* had saddled the national economy.