

# ИСТОРИЧЕСКИЕ ФАКТЫ, СОБЫТИЯ, ФЕНОМЕНЫ

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## New Rules of the Game? The Decline and Rise of State Autonomy Across the Russia's Revolutionary Divide

**Аннотация:** В статье поставлена задача проанализировать цикличность и преемственность развития государственной власти в России в XX в. на примере государственных организаций, созданных большевиками – в первую очередь Совнаркома и ВСНХ. Рассматривая советскую командно-административную систему в сравнении с плановыми институтами царской России и этапы ее эволюции, автор исследует, какие государственные структуры и принципы институционального поведения перешагнули революционный рубеж и тем самым помогли новой политической элите консолидировать политическую власть, необходимую для совершения долгосрочных экономических преобразований. Используется институциональный подход к анализу основных структур государственного управления советской экономикой, а также компаративистская методология для изучения цикличности власти в дореволюционный и советский периоды истории России / СССР. Автор приходит к выводу о том, что путь большевиков к общеэкономическому директивному планированию был постепенным, непрямым и обусловленным как насущными потребностями экономического развития, так и унаследованными от царской России управленческими традициями. Система централизованной плановой экономики многим обязана сложившейся еще до революции 1917 г. системе государственного управления. Не подвергая сомнению различия между двумя режимами, автор указывает на преемственность в структуре и ментальности экономической модели управления.

**Annotation:** The article analyzes and evaluates the cycle of governance in 20th century Russia, beginning with the Revolution of 1905. Drawing on a close study of a number of new organizations created by the Soviet regime, such as VSNKh or Sovnarkom, the author considers which state structures and institutionalized behaviors crossed the revolutionary divide, helping the new political elite to regain political capacity and authority, and producing long-lasting and significant consequences. The author pays particular attention to the origins and evolution of economic planning in Soviet Russia, using the institutional approach in his examination of the main structures of state governance of the Soviet economy, and also the comparative methodology for the study of the cycles of governance in the pre-Revolutionary and Soviet periods of Russian/ USSR history. The analysis and comparison of the creations of the new regime and state bodies of Imperial Russia led to the conclusion that the new rules of the game were essentially extensions of the patterns already in train, just as their reliance on the restored, increasingly powerful, increasingly autonomous centralized state apparatus. The author, however, does not assert that the new regime assumed the old imperial calculus of power without modifications.

**Ключевые слова:** история, Российское государство, государственная экономика, национальная экономика, государственные организации, система управления, политика большевиков, нео-институциональная теория, Совнарком, ВСНХ.

**Key words:** history, Russian state, state-economy, national economy, state organizations, system of governance, Bolshevik policy, neo-institutional theory, Sovnarkom, VSNKh.

The objective of this study is to evaluate the cycle of governance that is associated with the era of revolution in 20<sup>th</sup> century Russia. This era began with the Revolution of 1905 which culminated in the legalization of some competing political parties, the introduction of an imperial legislature (Duma) and other legal chang-

es that aimed at reducing the autonomous domestic power of the monarchy and its civil bureaucracy. The era continued, of course, with the Revolution of 1917 and its extended aftermath.

The initial moment in 1905 of violent confrontation between the state and anti-government elements, many of which had previously been op-

erating illegally underground, was facilitated by the absence of some military units which were engaged in a losing war with Japan and by the social and economic stresses created by the war effort. It was not surprising to at least some observers that, when a parallel situation arose twelve years later during the empire's disastrous participation in World War I, revolutionary chaos ensued once again. Leon Trotsky was not alone in thinking of 1905 as the "dress rehearsal" for the Revolution of 1917.<sup>1</sup>

The Russian Revolution of 1917 was/is the critical source for explaining the major changes in imperial Russian society during much of the twentieth century.<sup>2</sup> In terms of a body of theory that has come to be known as "neo-institutional", therefore, the Revolution has to have been a major engine for making changes to the "rules of the game" that shaped the formal and informal behavior of agents in state organizations. At least one social scientist who studied the institutional energies that were implicated in this revolutionary narrative asserts that the Russian Social Democratic Workers' Party (Bolsheviks), which gained ascendance in St. Petersburg and some other major cities within a few months, created new state organizations "suddenly and from scratch."<sup>3</sup> If this is so, we need to know which ones they were. And, of great importance given neo-institutional theory's concern with context and data validity, Were these creations merely changes of name and superficial organizational characteristics? Or did they really change the "rules of the game" and thus the institutional behavior of state organizations and their agents? While the insertion of Bolshevik (soon to be known as Communist) political bodies into a vast array of state and non-state organizations is a central part of this revolutionary narrative, we shall focus here on the organs of civil state administration.

In preceding studies we have examined the energies that the Russian state employed to establish and enhance its autonomous control over the huge geographic domains of its empire. One specific focus of these studies has been the proprietary relationship of the state to "its" economy –

a relationship in which policy makers and their agents, across time, were autonomous, in varying degrees, from the remainder of society. To the extent that this state-economy relationship served as a major source of autonomous state governing authority over social behavior, and to the extent that we are able to understand this relation as the product of the objectives of state elites, we have called it a calculus of power or a calculus of capacity and authority and we have found that this calculus is often incapable of shedding some previous habits of behavior of state agents and policies as it attempts to introduce new ones.<sup>4</sup>

In this study we consider which state structures and institutionalized behaviors crossed the revolutionary divide helping a new political elite to regain autonomous political capacity and authority. We do not assert that the new regime assumed the old imperial calculus of power without modification. What crossed were officialdom's strategies and tactics for achieving the autonomous power for which their predecessors had striven. What crossed was officialdom's willingness, in the fullness of time, to manipulate economic resources and to manage social structure and behavior in the name of imperial defense and social stability. We shall argue that the much more competitive, and somewhat more transparent, environments in which elites debated the use of governing capacity and authority during the 1920s required another reconfiguration that was the product of another calculus in the first years of the Stalin era. This calculus – as did many of its predecessors – intended to retain the state's institutionalized commitment to autonomous capacity and authority.

This study is not, of course, a survey of the entire political landscape of emerging Bolshevik governance. Instead this narrative focuses on those strategies for power projection that were shaped by institutional endurance (i.e. crossed the revolutionary divide) and were seated primarily in state agents' and agencies' design to regain control over the national economy and to resume development programs meant to gain state access to the most modern industrial and defense technologies available.

In spite of all of the authoritarian impulses that scholars attribute to Lenin, it is not possible to explain convincingly from within Bolshevism or the ideologies of the Communist Party either the emergence of an autonomous state system of governance

<sup>1</sup> This quote and one of Trotsky's appraisals of 1905 are found in: Trotsky L. *My Life. An Attempt at an Autobiography*. New York: Grosset & Dunlap, 1960. P. 175–186.

<sup>2</sup> For example, see Kotkin, Stephen. 1991 and the Russian Revolution: Sources, Conceptual Categories, Analytic Frameworks // *Journal of Modern History*. V. 70 (June 1998). P. 384–425.

<sup>3</sup> Skocpol, Theda. *States and Social Revolutions. A Comparative Analysis of France, Russia and China*. Cambridge UK: Cambridge University Press, 1979. P. 283.

<sup>4</sup> For example, see Rowney D. K. *Narrating the Russian Revolution: Institutionalism and Continuity across Regime Change* // *Comparative Study of Society and History*. V. 47. January 2005. P. 79–105.

or the creation of a plan program that would serve as the state's tool for stimulating and controlling economic development. It might well be possible to explain the genesis of the *ideal* of centralized allocation and planning. But this is a long way from explaining the implementation of a prescriptive plan and its enduring execution, thought by the public and many scholars to have become successful by the 1950s. The step of developing a rationale and strategy for centralized, prescriptive planning of the entire national economy and the effect upon it of channels, or processes, that linked it with the past is the focus of one section of this study. The managerial and market control connections with the past that were necessary for realizing these strategies will be the focus of an additional section.

### **Structural Components for Economic Control: Did They Cross the Revolutionary Divide?**

In describing the rigorous organizational procedures adopted by Lenin's principal tool for revolutionary control from the center, The Council of Peoples' Commissars (Sovnarkom), Rigby identified the consequences of institutional endurance without using neo-institutionalist terminology:

"In fact models for the machinery and procedures adopted by Sovnarkom had already been provided by its predecessors in the Tsarist and Provisional governments.

If, however, both the need and the models for such arrangements were present, it was still necessary that both should be perceived, and the latter adapted and applied. And here the credit must go first and foremost to Lenin himself, to his First Head of Chancellery, Bonch-Bruyevich, to such second-line officials as Bogolepov and Kozlovsky, and almost certainly (though much harder to document) to a handful of senior officials, such as P. M. Trokhimovsky, carried over from the old regime. It is remarkable, and perhaps unprecedented, that Lenin, a man approaching fifty who had spent his whole youth and adult life as a professional revolutionary, could apply himself so single-mindedly and persistently to such humdrum matters, especially when one recalls the critical and chaotic circumstances in which he did so."<sup>5</sup>

Sovnarkom was the direct organizational heir of two pre-revolutionary organizations, the Council of Ministers and the Committee of Ministers. Sovnarkom exhibited a very similar organization-

al structure and labored with much the same organizational responsibilities as its predecessors; the major changes were that new ministries (now called commissariats) were added and that the members (since mid-1917 known as commissars rather than ministers) sometimes did not owe their administrative experience directly to the pre-revolutionary system of elite career development. The "critical and chaotic circumstances" in which Lenin formed his own version of this organization were more affected by the underlying procedural framework – including record keeping methods, procedures for maintaining contact with other government organizations, and for maintaining control over authorized operations – than if Lenin or other revolutionaries had had time to devise a strategy for evading the conservative and potentially counter-revolutionary implications of these old procedures. The destruction of institutionalized habits of behavior and of the organizations within which they are nurtured and sustained must be at least as administratively, intellectually and politically challenging, and nearly as time-consuming, as creating them in the first place.

Between 1917 and the early 1920s the organizational structure that the Russian post-revolutionary regime would finally adopt was not clear and, during those years, underlying institutional continuities were not as evident as they would later be. Note, nevertheless, that elite weakness in certain circumstances (such as the blundering incompetence described by Gatrell, Lih and others<sup>6</sup>), did not necessarily mean that the organizations which they served disappeared, or that, under the right circumstances, they would not be potent and effective instruments for imposing constraints (or, in Rosenberg's phrase, serving as arenas for negotiation and conflict resolution<sup>7</sup>) on social transactions at another time. The 1914–21 era, especially in the more intensely industrialized provinces of European Russia, the northern provinces on the Baltic Sea and Poland witnessed a rapid unraveling of infrastructural networks such as rail, electricity, and commodity distribution. Paralysis of formal state organizations may have been the cause of some of this unraveling; infrastructure oversight had become a major state responsibility from the mid-19<sup>th</sup> century forward. But it is also evi-

<sup>6</sup> Gatrell P. A Whole Empire Walking: Refugees in Russia during World War I. Bloomington: Indiana University Press, 1999; Lih L. T. Bread and Authority in Russia, 1914–1921. Berkeley: University of California Press, 1990.

<sup>7</sup> Rosenberg W. G. Social Mediation and State Construction(s) in Revolutionary Russia // Social History. V. 19. No 2 (May, 1994). P. 182–186.

<sup>5</sup> Rigby T. H. Lenin's Government: Sovnarkom 1917–1922. Cambridge UK: Cambridge University Press, 1979. P. 224.

dent that the physical destruction of infrastructure – railways, telegraph and telephone – contributed to operational paralysis of governance and that the reconstitution of infrastructure depended upon the reconstruction of state organizations.

The Supreme Council of the National Economy (VSNKh), created just weeks after the Bolshevik seizure of power in 1917, was one of the first new administrative entities to appear. But it was created in the midst of a revolutionary fog of novel entities such as many hundreds of spontaneously organized local control committees, known as “soviets”, an inheritance from the Revolution of 1905. Some of these new entities survived in one form or another and others did not. VSNKh went through administrative ups and downs during the 1920s. By the end of the decade, however, it was a huge, powerful, centralized bureaucracy responsible for oversight and reorganization, under state control, of large numbers of enterprises. Ultimately, it was broken up into three (and, subsequently, numerous) state industrial management bureaucracies during the First Five Year Plan.<sup>8</sup> Other organizations, not fully integrated into the central apparatus in Moscow, ultimately disappeared (although they seemed quite vigorous for months or years) and their long-term influence either on policy or social behavior is questionable. Apart from a few historians, who, today, has ever heard of Workers’ and Peasants’ Inspection (RabKrIn) or of Workers’ Control (RabKontrol’)? Each of these organizations was absorbed into the enduring state apparatus in ways that denied them any evident, long-term governing authority.<sup>9</sup>

Deciding which of the new post-1917 organizations were entirely new, which carried limiting or controlling traces of old regime state organizations, and which would finally leave an enduring imprint on Soviet, and perhaps world, society is thus not easy. From the vantage point of, say, 1924 it was clear that both VSNKh and Sovnarkom were increasingly strong organizations, amplifying centrist control based in the revolution’s new capital, Moscow. It was also clear that they were achieving their strength partly by denying power to scores or hun-

dreds of local bodies (soviets) formed spontaneously during the revolution. Even in 1924, however, what was genuinely novel and what was an extension of old regime structures was far from clear. This was owing partly to a self-conscious and successful policy of the Communist Party to obscure old regime links and to represent organizations created by the revolution as brand new, staffed by agents who were no longer “chinovnichestvo” (state bureaucrats with upper-level rank), but ordinary workers (not merely “sluzhashchie”, but “rabochie”) by legal decree.<sup>10</sup>

The Bolsheviks represented themselves and the society they were creating as sharply discontinuous with the past even though both logic and the empirical data their own, numerous, surveys produced belied the effort. The logic came from the fact that, beyond the old state elites and their agents, there were few Russians who had the training – even the literary and ciphering skills – necessary for carrying on the clerical roles of state service. This inevitably meant that all state agencies relied to some extent on holdovers from the old regime. Since, in the threatening conditions of the post-revolutionary era there was a strong motivation for individuals who were somehow formally associated with the old regime to conceal this fact, the findings of the numerous surveys conducted by the new regime are extraordinary. For example, according to survey data from 1922 of top commissariat officials, 30% admitted to having been drawn from the ranks of upper state service to the old regime.<sup>11</sup> As late as 1927 half of senior officials of the Commissariat of Posts and Telegraphs had been employed by administrative offices of the old regime.<sup>12</sup> Doubtless in partial response to this state of affairs, as Figes and Kolonitskii show, New Regime officials in both state and Communist Party offices supported and contributed to the conceptual revolution by “desacralizing” the monarchy, associating their revolution with the French Revolution of 1789, substituting new images of leadership for the now contemptible old ones, and, above all, aggressively substituting

<sup>8</sup> Rowney D. K. The Scope, Authority, and Personnel of the New Industrial Commissariats, 1928–1936 // *Social Dimensions of Soviet Industrialization* / W. G. Rosenberg, L. Siegelbaum (eds.). Bloomington: Indiana University Press, 1993. P. 124–145.

<sup>9</sup> For example, Morozov L. F., Portnov V. P. *Nachal’nyi etap v osushchestvlenii Leninskiikh idei o gosudarstvennom kontrole* // *Voprosy Istorii KPSS*. 1979. N 11. P. 33–44; Ferro M. *Révolution et totalitarisme. La naissance du système bureaucratique en U.R.S.S.* // *Annales. Économies, Sociétés, Civilisations*. 31e année. No 1. 1976. P. 243–267.

<sup>10</sup> Arkhipova T. G., Rumiantseva M. F., Senin A. S. *Istoriia gosudarstvennoi sluzhby v Rossii. XVIII – XX veka*. Moscow: Russian State Humanities University, 2001. P. 153–156.

<sup>11</sup> Vasiaev V. I. et al. *Dannye perepisi sluzhashchikh 1922 g.* Moscow: Moscow State University Press, 1962. P. 61–62; Additional analysis is in Rowney D. K. *Transition to Technocracy. The Structural Origins of the Soviet Administrative State*. Ithaca: Cornell University Press, 1989. P. 94–123.

<sup>12</sup> People’s Commissariat for Posts and Telegraphs, *Perepisi’ rabotnikov svyazi, 27 inavaria 1927 goda*. Moscow: Press of the Peoples Commissariat for Posts and Telegraphs, 1929. P. 41. Table 3.

new organizational and policy images, titles and language for those of the old regime.<sup>13</sup>

If we take a closer look at VSNKh, one of the most emblematic new organizations created by the revolutionary regime, the difficulties of making a judgment about organizational origins become more apparent. Apart from the Communist Party itself, if any of the novel creations of the revolution can be said to have produced long-lasting and significant consequences that justify the claims of some historians of the revolution, it must be this one. Its impact on the national economy together with its utility to the early Stalinist era as an instrument of social control must surely qualify it as an institution that shaped the Soviet world of the 20<sup>th</sup> century and contributed to the reconstruction of autonomous state power, at least in the domestic sphere. The questions that remain, however, are: How novel was it? And what, if anything, did it owe to old regime legacies as opposed to the Bolshevik vision of a new society that demanded new institutions? Did the Bolsheviks create it “from scratch”, or was it a product of policies and the work of political elites that owed significant debts to the old regime and that, therefore, pre-dated the Revolution of 1917 and even World War I?

During World War I, as an increasing number of historians now agree, states attained a new level of involvement in their national economy in the sense that state elites took steps to integrate and manage the national economy in large commercial and manufacturing blocs. In Russia the first steps, taken in the spring of 1915, were designed to be implemented by the Ministries of Ways of Communication and Trade and Industry. They focused not on the traditional concerns of a Russian government at war – manpower and finance – but on control of transport and raw materials.<sup>14</sup> In June 1915, the first

of a series of coordinating boards appeared under the presidency of the Minister of War. Including representatives of several other ministries, of the imperial legislature (Duma), and representatives of trade and manufacturing enterprises, this Special Advisory Council was subordinate only to the tsar, a stricture that normally conferred autonomy. It was the first body to be given power to control the operations of groups of firms either by preemptive orders or by requisition.<sup>15</sup> In August, 1915 a quartet of new Special Advisory Councils, replacing the one created in the spring, received broad powers to coordinate measures in the national economy to support national defense, provide fuel for state civil and military operations, control the food supply and the transportation of these items and others deemed essential to national defense. Again, these bodies included representatives from various segments of state and private industry under the presidency of senior officials possessing extraordinary executive authority. These organizations were called “state institutions of the highest order” answerable, once again, only to the tsar.<sup>16</sup>

The impulse to create these organizations was doubtless inspired by a need to master a war-time crisis and, in this respect, Russia imitated Germany and other warring states. This is the explanation that Siegelbaum and others offer and it is plausible.<sup>17</sup> However, if one looks at the immediate pre-war period, there is reason to see these wartime approaches to the problem of procurement as extensions of a still earlier era.

Beginning as early as the 1880s, the state either acceded to or encouraged the consolidation of increasingly large firms into syndicates and trusts for the main purpose of manipulating markets.<sup>18</sup> By 1914, there were some 150 of these syndicates across fifty industries.<sup>19</sup> It was these

<sup>13</sup> Figes O., Kolonitskii B. *Interpreting the Russian Revolution. The Language and Symbols of 1917*. New Haven: Yale University Press, 1999: on the monarchy, especially p.13–18; on association with the language and symbols of the French Revolution of 1789, p. 30–37; on titles, p. 57–61; on language more broadly, p. 107–126; and *passim*.

<sup>14</sup> O nekotorykh merakh k obezpecheniiu toplivom uchrezhdenii armii i flota i putei soobshcheniia a ravno chastnykh predpriatii, rabotaiushchikh dlia tselei gosudarstvennoi oborony // *Sobranie zakonov*. St. 865 (31 March, 1915); O rasprostraneni polnomochii, prisvoennykh Ministru Putei Soobshcheniia Imennym Vysochaishim Ukazom 4ogo Marta 1915 goda, na dela po obezpecheniiu toplivom gosudarstvennykh i obshchestvennykh uchrezhdenii // *Sobranie zakonov*. St. 1091 (2 May, 1915); O predstavlenii Ministru Torgovli i Promyshlennosti osobykh polnomochii po obshchemy rukovodstvu prodovol'stvennym delom v Imperii // *Sobranie zakonov*. St. 1169 (19 May, 1915); Ob utverzhdenii pravil o poriadke i usloviakh raspredeleniia tverdago mineral'nago topliva mezhdu potrebiteliami // *Sobranie zakonov*. St. 1215 (29 May, 1915).

<sup>15</sup> Ob utverzhdenii polozheniia ob osobom soveshchaniu dlia ob'edineniia meropriatii po obezpecheniiu deistvuiushchei armii predmetami boevogo i material'nago snabzheniia // *Sobranie zakonov*. St. 1280 (7 June, 1915).

<sup>16</sup> See summary in: *Pravitel'stvennyi vestnik*. No. 182 (Wednesday, 19 August/1 September, 1915). P. 1. Cols. 2, 3.

<sup>17</sup> Siegelbaum L. H. *The Politics of Industrial Mobilization in Russia, 1914–1917: a Study of the War-Industry Committees*. New York: St. Martin's, 1983.

<sup>18</sup> Among others, see: Laverychev V. Ia. *Gosudarstvo i monopolii v dorevoliutsionnoi Rossii*. Moscow: Mysl', 1982; Idem, *Zarozhdenie gosudarstvenno-monopolisticheskikh tendentsii v rossiskoi ekonomike kontsa XIX v.* // *Istoricheskie zapiski Akademii Nauk SSSR*. V. 109. Moscow, 1983. P. 95–128.

<sup>19</sup> Kafengauz L. B. *Sindikaty v Rossii* // *Evolutsiia promyshlennogo proizvodstva Rossii (posledniaia tret' XIX v. – 30-e gody XX v.)*. Ed. L. B. Kafengauz. Moscow, 1994. P. 625–628.

150 syndicates that were marshaled into main administrations for supply and distribution (*glavki*), first under the *tsarist* government's Central War Industries Committee (1915), the Special Council for National Defense (1916), and subsequently under the Bolsheviks' Supreme Council for the National Economy (VSNKh) between 1917 and 1921.<sup>20</sup>

That the existence of pre-war trusts mattered when it came to creating the administrative foundations for a centralized plan apparatus seems indisputable. On the one hand, *tsarist* era *glavki* served as the administrative foundation for state supply-demand coordination in early post-Revolutionary days – so much so that the early *glavki* were sometimes seen by VSNKh as competitors for managerial control of large manufacturing.<sup>21</sup> On the other hand, the carryover of staff from the *tsarist* bureaucracies was large enough to be a source of concern to Bolshevik senior leadership owing to differences in policy objectives and the suspicion that these staffs were simply not trustworthy by revolutionary standards.<sup>22</sup>

In an excellent study of the transfer of economic organizations across the divide, Malle describes the claim by a senior official, Iu. Larin, that he arbitrarily and personally authorized the creation of *glavki* as a source of “the epic distortion of post-revolutionary records.”<sup>23</sup> Remington too identifies areas in which “without a blueprint” the Bolsheviks subsumed such organizations directly from the old regime. He includes not only the *glavki*, but also territorial administration, and State Control (the organization that won the contest with that revolutionary novelty, *RabKrIn* (Workers' and Peasants' Inspection) in 1918, for fiscal oversight of state operations).<sup>24</sup> By contrast, the creation of a central control apparatus for such relatively decentralized, longer-established industries as textiles was slower than that of industries such as mining, coal and sugar where comparative-

ly integrated trusts had already been established – some as early as the 1880s.<sup>25</sup>

Even without considering the Russian state's special relationship to the national economy, then, any effort to characterize the origins of the plan system and its associated administrative apparatus raises the question, Why did the Bolsheviks, whose political values were shaped by an ideology that depicted the state, its officials, and its organizations as tools of coercion and exploitation, choose to employ a strategy of development that required a strong-state foundation?

The increasingly common, but hardly novel, explanation is that Bolsheviks were pursuing initiatives which combined socialist ideology and wartime exigencies. This “technocratic response” to World War I (in the phrase employed some years ago by Alchon<sup>26</sup>) is the broadly plausible explanation of the rise of the “mobilization state” offered by Remington and extended considerably in the work of Porter.<sup>27</sup> This seems a likely necessary part of the explanation for the Bolshevik acceptance of the strong state; but it does not seem sufficient to account for the long-term endurance of the policy – or, indeed, for the Bolshevik commitment to re-conquer all of the breakaway components of the imperial state during the Civil War and other military operations in the 1920s.

Following the Civil War, with the major exceptions of Poland, the Baltic states, Finland and an enclave on the border with Turkey, the geographic “state” with which the Bolsheviks were working was largely the same territory that was known as the Russian Empire before 1914. Associated with that territory were organizational resources that gave substance and continuity to both *tsarist* and Soviet wartime mobilization strategies. Without these, the fate of the mobilization strategy would presumably have been the same in Russia as it was in Germany or Great Britain – with the return to peacetime, more decentralized modes of economic operation and the emergence of post-war political issues that eventually undermined public support for mobilization. In a sense, this is the deconstruction of

<sup>20</sup> Malle S. *The Economic Organization of War Communism, 1918–1921*. Cambridge UK: Cambridge University Press, 1985. P. 218–219. Note, however, that Malle traces the history of trusts and syndicates only to the post-1905 era in contrast to Kafengauz («Sindikaty v Rossii». P. 626) who traced their origins to the 1880s).

<sup>21</sup> Malle S. *Economic Organization*. P. 219–221.

<sup>22</sup> Malle S. *Economic Organization* P. 223–24; also, Rowney D.K. *Transition to Technocracy*. P. 109–123.

<sup>23</sup> Malle S. *Economic Organization* P. 223–234.

<sup>24</sup> Remington, Thomas F. *Building Socialism in Bolshevik Russia. Ideology and Industrial Organization, 1917–1921*. Pittsburgh: University of Pittsburgh Press, 1984 P. 44–45, 48, 67, 74–75, 1 80–81.

<sup>25</sup> Husband, William Benjamin. *The Nationalization of the Textile Industry of Soviet Russia, 1917–1920*. Princeton University, PhD dissertation, 1984. P. 256–304. Also, see Alec Nove's comments in “An Economic History of the U.S.S.R” (New York: Penguin Books, 1972. P. 52) and Malle S. *Economic Organization*. P. 224.

<sup>26</sup> Alchon, Guy. *The Invisible Hand of Planning: Capitalism, Social Science and the State in the 1920s*. Princeton: Princeton University Press, 1985. P. 21–50.

<sup>27</sup> Remington Th. F. *Building Socialism*. P. 3–22; Porter, Bruce D. *War and the Rise of the State. The Military Foundations of Modern Politics*. New York: Free Press, 1994.

autonomous state governing capacity which the program known as War Communism (1917–21) attempted to achieve: a radical – one might say anarchic – decentralization of authority and disaggregation of offices so extreme that many already weakened urban and industrial organizations nearly disintegrated. That this was not the ultimate outcome in Russia and that War Communism was succeeded, during the New Economic Policy (1921–27), by re-centralization of authority over segments of the economy, over former imperial territory and over state offices argues that wartime mobilization worked in conjunction with a longer-lived, institutionalized bureaucratic behavior.

### The Planned Economy as a Bolshevik Policy

Bolshevik elite politicians took their time, during the 1920s, in deciding whether to employ a prescriptive plan for the entire economy. As we see below these considerations were deeply enmeshed in the politics of state autonomy, and, after Lenin's death in 1924, the politics of succession.<sup>28</sup> Decisions to use complex planning strategies for specific projects such as national electrification came much more readily. The intra-party and public debates that occurred across the 1920s on the much broader topic known as the "Soviet industrialization debate" were far more complex and laden with controversy. These have been rehearsed and analyzed intensely by scholars and by the participants themselves.<sup>29</sup> There could not have been, simply, an industrialization debate: Russian industrialization was far too industrially advanced for that. The debate actually focused on *Soviet* industrialization –

<sup>28</sup> Drobizhev V. Z. *Glavnyi shtab sotsialisticheskoi promyshlennosti*. Moscow: Mysl', 1966; Deutscher, Isaac. *The Prophet Unarmed. Trotsky: 1921–1929*. New York: Vintage, 1965; Cohen, Stephen F. *Rethinking the Soviet Experience. Politics and History since 1917*. New York: Oxford University Press, 1985; Carr E. H. *The Russian Revolution from Lenin to Stalin, 1917–1929*. London: Macmillan, 1979.

<sup>29</sup> Erlich, Alexander. *The Soviet Industrialization Debate, 1924–1928*. Cambridge MA: Harvard University Press, 1960; Cohen, Stephen F. *Bukharin and the Bolshevik Revolution*. New York: Oxford University Press, 1980. P. 60–159; Lewin, Moshe. N. I. Boukharine: Ses idées sur la planification économique et leur actualité // *Cahiers du Monde Russe et Soviétique*. 1972. 13, 4. P. 481–501. Commentary by participants in Soviet politics during the 1920s include: Preobrazhenskii E. A. *Novaia ekonomika. Opyt teoreticheskogo analiza sovetskogo khoziaistva*. Moscow: Press of the Communist Academy, 1926. (An English translation by Brian Pearce was issued under the title "The New Economics". Oxford: Clarendon Press, 1966); and Trotsky L. *Towards Socialism or Capitalism?* / Trans. R. S. Townsend and Z. Vengerova. London: Methuen, 1926.

upon what such a phenomenon as *Soviet* industrialization might mean and in what respects it would be different from industrialization as found in the old regime and elsewhere in the world.

The decisions that ultimately eventuated in the formation and implementation of a plan for the whole economy cannot be explained without reference to preceding sequences of events, that is, to "history." To the extent that an explanation is sited within the overall framework of the role of social institutions, a narrative that identifies the relevant sequences, or processes, should also plausibly explain how they produced specific results at a later point in time. That is, merely to invoke tradition, or inertia, is not sufficient. One needs to identify not only the relevant organizations and institutions but a channel or process through which they endured over time.<sup>30</sup>

The first public discussions at senior political levels of economy-wide planning in revolutionary Russia seem to have occurred during the summer and autumn of the year 1917. These consisted in assertions that centralization of economic control was the ideal tool of the revolution for arresting economic disintegration and achieving economic growth. In a pamphlet published at this time (i.e. just before the Bolshevik seizure of power in October), Lenin identified five "principle measures" which would achieve this objective:

These principal measures [Lenin wrote] are:

- 1) Amalgamation of all banks into a single bank, and state control over its operations, or nationalisation of the banks.
- 2) Nationalisation of the syndicates, i.e. the largest monopolistic capitalist associations (sugar, oil, coal, iron and steel, and other syndicates).
- 3) Abolition of commercial secrecy.
- 4) Compulsory syndication (i.e. compulsory amalgamation into associations) of industrialists, merchants and employers generally.
- 5) Compulsory organization of the population into consumers' societies, or encouragement of such organization, and the exercise of control over it.<sup>31</sup>

<sup>30</sup> For a detailed explanation of this methodology as applied to diplomatic history and international relations, see Bennett, Andrew and George, Alexander L. "Case Studies and Process Tracing in History and Political Science: Similar Strokes for Different Foci" (in Colin Elman and Miriam Fendius Elman, eds., *Bridges and Boundaries. Historians, Political Scientists, and the Study of International Relations*. Cambridge MA: MIT Press, 1991. P. 137–166).

<sup>31</sup> *The Impending Catastrophe and How to Combat It // Lenin's Economic Writings* / Meghnad Desai ed. Atlantic Highlands, NJ: Humanities Press International, 1989. P. 183.

In this formulation, as in others, the political and administrative structures essential to creation of a system of central management were clearer, although not always by much, than were the techniques necessary for producing a state-wide plan. As the discussion of these measures developed in the 1917–20 period, it is evident that they were based, first, on a literature in economics, politics and social work that had emerged in several countries, including Russia, at the turn of the 20<sup>th</sup> century. The most concrete and technical contributions to Russian thinking came from Germany, the Russian Empire itself and, importantly, from the development of statistical data gathering and analysis as professions. As Martine Mespoulet has shown, this evolving professionalism was tied closely with the *zemstvo* provincial and district governance movement in the second half of the nineteenth century – a connection which would have significant implications for the evolution of Soviet planning after 1917.<sup>32</sup> In addition, discussion about economic management drew upon previous planning experiences in Russia: the attempt by *zemstvo* economists to rationalize management of the rural economy before 1914, the syndicates mentioned previously in this study and by Lenin in Measures 2 and 4 above, and the creation during the war of other state agencies discussed above.

As Stone, Wheatcroft and Davies point out, the origins and evolution of economic planning as a concept and network of methods owes much to early statisticians (or “political arithmeticians”), such as François Quesnay and Gregory King. Additionally, Stone, Wheatcroft and Davies also call attention specifically to work by *zemstvo* statisticians on the Russian rural economy in the 1880s and 1890s.<sup>33</sup> Note, however, that, in addition to theories and methods, the sort of planning that was being proposed by some participants in these discussions relied upon the reconstruction of strong state organizations and a willingness, on the part of state elites, to formulate a calculus for using them to achieve state-prescribed economic objectives.

In the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, theories that required some degree of government intervention into economic development were not uncommon

both in Europe and North America. Across the preceding two decades, even in the United States, a growing cohort of social scientists was arguing that the chronic cyclicity of capitalist economies was producing social catastrophes – chiefly, unemployment during recessions, and over-exploitation of labor during expansions – of such a magnitude that large philanthropies and, ultimately, the state must begin to play a controlling role in the management of markets.<sup>34</sup> In addition, other voices speaking on behalf of business added to this chorus: the capitalist habit of boom and bust was wasteful for manufacturing and destructive of public confidence. The “systematic management” movement and, subsequently, “scientific management” (Taylorism) began to be accepted as promising, if unproven, strategies for rationalizing business and worker behavior.<sup>35</sup>

Out of these critiques arose, first, a demand for more, and more detailed, information about economic and social structures and behavior – a new social-science information universe. Second, as noted above, for many industrialized economies in Europe and North America, the onset of World War I demanded what Alchon calls “technocratic mobilization.”<sup>36</sup> Under wartime conditions, states required industrialized economies to re-orient their priorities on short notice, both with respect to inputs of raw materials and outputs of products, and with respect to the use of labor. A common view – in Britain, Germany, France, the United States, and, as we shall see below, in Russia – was that these outcomes required interventions that were the responsibility of the state.

Before the beginning of the war in Russia there had been extensive discussion among economists and, especially, engineers of the utility and techniques of planning for achieving development. In practice, this planning in its earliest Russian incarnations was similar to the kind of project planning found elsewhere in the industrialized world at this time. Owing to the structure of the Russian political economy, however, the state, embodied in the Ministry of Ways of Communication, the Ministry of Finances, and the Ministry of Internal Affairs, was frequently and deeply involved. The Trans-Siberian Railway, one of the largest and most capital-intensive projects in the world at the turn of the twentieth century, involved both imperial and regional state administrations intensely.

<sup>32</sup> Mespoulet, Martine. *Statistique et révolution en Russie. Un compromis impossible (1880–1950)*. Rennes: Presses Universitaires de Rennes, 2001. Also see Stanziani, Alessandro “Statisticiens, zemstva et état dans la Russie des années 1880” (*Cahiers du Monde Russe et Soviétique*. 1991. 32, 4. P. 445–467).

<sup>33</sup> *Materials for a Balance of the Soviet National Economy, 1928–1930* / S. G. Wheatcroft and R. W. Davies, eds. Cambridge UK: Cambridge University Press, 1985. P. 34–35.

<sup>34</sup> Alchon G. *Invisible Hand*. P. 8–20.

<sup>35</sup> *Ibid.* P. 15–18 and *passim*.

<sup>36</sup> *Ibid.* P. 21–32.



Railway construction, to co-opt Coopersmith's phrase the "favored state technology" before 1917, demanded detailed technical and fiscal planning. For example, at the end of the 19<sup>th</sup> century, the Society of Engineers of Ways of Communication (i.e. transport engineers) frequently published proposals for the coordinated technical development of everything from overpasses and seaports to entire rail networks.<sup>37</sup>

The large number of Russian men with training as military staff officers was exposed both to the need for planning and to its effect in the management of large-scale operations.<sup>38</sup> During the final decades of the nineteenth century, senior-level Russian military staff and specialist schools graduated 2,500 to 3,000 individuals annually. Together with the output of the civilian technical schools, this meant that by the turn of the century in Russia there were thousands of men – junior and mid-rank staff in the state organizations that were the biggest consumers of higher educational training such as the Ministry of War and Ministry of Finances – with at least some of the training necessary to create, understand and critique project plans.<sup>39</sup> Given the concentration of both state technical offices and private, very large-scale manufacturing in the two largest cities, there was a high concentration of persons so trained and experienced in St. Petersburg and Moscow.

The concept of planning that would transcend projects and take the entire economy as its responsibility was rooted in the developing interest in state roles in economic management before World War I. The works on this subject that are frequently cited as fundamental to the development of Soviet planning included one in German, by the Latvian demographer and political economist, Karl Ballod. This visionary work, *Der Zukunftsstaat*, or *Futurestate*, was

<sup>37</sup> For example: Sultanov F. Ob ustroistve pod"ezdnykh putei i portov v oblastiakh, primykaiushchikh s iuzhnoi chasti Kaspiiskago moriia // *Izvestiia Sobraniia Inzhenerov Putei Soobshcheniia*. 1900. No. 7. P. 129–136. One also finds broader and potentially more polemical themes in these publications: "O roli pravitel'stva i chastnoi initsiativy v dele ustroistva, oborudovaniia i eksploatatsii nashikh torgovykh portov. I. Doklad Inzhenera V. E. Timonova and II. Doklad Inzhenera N. I. Vosnesenskogo." (Both are in: *Izvestiia Sobraniia Inzhenerov Putei Soobshcheniia*. 1892. No. 1 (January). P. 13–24.

<sup>38</sup> In this connection see: Coopersmith, Jonathan. *The Electrification of Russia, 1880–1926*. Ithaca: Cornell University Press, 1992. P. 20 and passim.

<sup>39</sup> On the graduation of military technical specialists see: Zaionchkovskii P. A. *Samoderzhavie i russkaia armia na rubezhe XIX–XX stoletii*. Moscow: Mysl', 1973. P. 294–337; on the supply of engineers in the civilian sector before 1914 see Bailes, Kendall E. *Technology and Society under Lenin and Stalin. Origins of the Soviet Technical Intelligentsia, 1917–1941*. Princeton: Princeton University Press, 1978. P. 27–31.

translated into Russian and published in 1906 with a preface by Karl Kautsky.<sup>40</sup> There is some controversy over Ballod's impact – in my judgment the book itself is not a resource that anyone could employ in the preparation of an effective, prescriptive plan.<sup>41</sup>

Both contemporary and later observers agree that the work of V. I. Grinevetsky served as a basic reference for the thinking of early Russian planners.<sup>42</sup> Grinevetsky was Professor of Engineering and Rector of the Moscow Institute of Technology. He was neither Bolshevik nor Marxist, nor even a political radical, and he made no secret of this fact. His book *The Post-War Prospect for Russian Industry* is frequently mentioned as a source of ideas for both technocrats and politicians in the post-Revolutionary Soviet state.<sup>43</sup> Importantly, however, as the work of an engineer, Grinevetsky's *Prospect* focused more on the advantages of integrating upstream and downstream manufacturing and marketing processes than on the practical problems of prescribing inputs into and extracting outputs from every firm in the country.

Other early writers on the roles of technical integration and planning in industry subsequently influenced policy development by working for the Soviet state. These included I. A. Gladkov, Y. I. Larin and V. P. Miliutin.<sup>44</sup> Lev Kritsman was involved in an

<sup>40</sup> Karl Ballod's "Der Zukunftsstaat" appeared in Russian translation as "Gosudarstvo budushchago: proizvodstvo i potreblenie v sotsial'nom gosudarstve" (s predislavie K. Kautskago. St. Petersburg, 1906).

<sup>41</sup> On his role and influence see: Carr, Edward Hallett. *The Bolshevik Revolution, 1917–1923*. New York: Norton, 1952. V. 2. P. 373; Coopersmith J. *Electrification*. P. 139 (where Ballod is described as a significant influence); and Guroff, Gregory. *State and Industrialization in Russian Economic Thought, 1909–1914*. Princeton: Doctoral Dissertation, Princeton University (1970). P. 262–264 (where a contemporary observer of the 1920s is quoted as denying him any meaningful role).

<sup>42</sup> Grinevetskii V. I. *Poslevoennye perspektivy Russkoi promyshlennosti*. Second edition, Moscow: Press of the All-Russian Central Union of Consumer Societies, 1922. The first edition, published in Kharkov, appeared in 1919.

<sup>43</sup> Smolinski, Leon. *Grinevetskii and Soviet Industrialisation // Survey*. 1968. No. 67. P. 100–115. Also see: Jasny, Naum. *Soviet Economists of the Twenties. Names to be Remembered*. Cambridge UK: Cambridge University Press, 1972. P. 100.

<sup>44</sup> *K istorii plana elektrifikatsii Sovetskoi Strany. Sbornik dokumentov i materialov, 1918–1920 gg.* / Ed. I. A. Gladkov. Reprint of the 1923 publication. Moscow: State Press for Political Literature, 1952. Also Carr's discussion of Larin's early work in *Vestnik Evropy* in "The Bolshevik Revolution", 2. P. 361–363 and Malle S. *Economic Organization*. P. 299–309. Miliutin wrote broadly on agricultural and general economics in the early revolutionary period. Like Larin, he was regarded as a planning "hawk" (activist) by contemporaries including Lenin. See Miliutin, Vladimir P. *The Economic Organisation of Soviet Russia: a Brief Sketch of the Organisation and the Present Situation of Industry in Russia*. London: Communist Party of Great Britain, 1920.

effort, embodied in the Committee for Utilization during late 1918 and 1919, to manipulate supply and demand by re-calculating material inputs and outputs, a technique that would later become part of the State Planning Commission's (GOSPLAN) approach to planning.<sup>45</sup> Unlike Ballo and Grinevetsky, these men were left-wing political activists rather than mainstream intellectuals or academics.

An additional, essential, piece in the development of plan concepts arose with the increasing interest of economists in the components and size of national income. In the United States, for example, Edwin Gay, the first dean of Harvard's School of Business (1908), argued that a rational wage policy could only be developed by enterprises or by the state on the basis of accurate national income data.<sup>46</sup> In Russia, two economists who had similar views on the connection between rural incomes and the gross structure and value of the economy were V. G. Groman and P. I. Popov. The subsequent roles that these men played in plan development during the 1920s gives each some claim to paternity in the birth of the plan – a claim which was fraught with political conflict.

Groman had at least two consuming passions as a young man: radical Social Democratic activism on behalf of workers and peasants and statistics.<sup>47</sup> Of course, in Tsarist Russia these interests were bound to conflict with one another. In 1897 Groman was expelled from the University of Moscow for political activism and exiled to a series of towns in the provinces. Groman, nevertheless, found ways to weld his two interests together. Like Popov he served as a statistical consultant to provincial zemstvo organizations (Popov in Tula; Groman in Penza and other places). Both men developed strong reputations in the novel techniques of survey research and statistical analysis. Both Popov's and Groman's connection with the zemstvos exposed them to the strong tradition of zemstvo data gathering.<sup>48</sup>

At the beginning of World War I, Groman served as a representative to the Special Commis-

sions on Supply that were meant to coordinate supply and demand for strategically important commodities, raw materials and manufactured products amid conditions of growing scarcity. We shall look at the roles of these commissions as transmission channels for planning operations more closely in the following section. What is significant for our purposes here is that, in connection with this work, both Groman and Popov worked on ambitious data gathering and analysis programs aimed at tracking and rationalizing food supply and distribution. According to Wheatcroft and Davies, these efforts provided “a model for the sectoral balances that eventually formed a major part of the balance of the national economy.”<sup>49</sup>

During the revolutionary year 1917, Groman, according to at least one memoir of a personal acquaintance, became a strong planning advocate.<sup>50</sup> After the abdication of Nicholas II, according to Jasny, Groman demanded that the new government should create a unified plan to rationalize the distribution of grain and to prevent prices from spiraling out of control in conditions of dwindling supplies. Owing to Groman's nascent concepts of the linkages among different sectors of the entire economy, this unified plan aimed to take account of the role of grain within the national economy so as to value it accurately. This notion that there was a necessary “balance” among sectors, as well as across inputs and outputs of the economy became, along with his statistical sampling techniques, a Groman trademark.

Popov, for his part, focused his energies on convincing the revolutionary elite of the necessity of gathering all state data collection agencies into an expanded version of the Tsarist Central Statistical Committee and Council.<sup>51</sup> This was to be a new Central Statistical Administration. In 1918, Popov was appointed head of this reconstituted body and

<sup>45</sup> Kritsman's work is discussed in several studies. For example, Lewin, Moshe. *Political Undercurrents in Soviet Economic Debates. From Bukharin to the Modern Reformers*. Princeton: Princeton University Press, 1974. P. 79–80. Also see Littlejohn, Gary. *The Agrarian Marxist Research in its Political Context: State Policy and the Development of the Soviet Rural Class Structure in the 1920s* // *Journal of Peasant Studies*. 1984. No 11, 1. P. 61–84; and Malle S. *Economic Organization*. P. 304–314.

<sup>46</sup> Alchon G. *Invisible Hand*. P. 52–55.

<sup>47</sup> For a biography of Groman by a first-hand observer see Jasny N. *Soviet Economists*. P. 89–123.

<sup>48</sup> Mespoulet M. *Statistique et Révolution*. P. 27–119.

<sup>49</sup> Wheatcroft S. G. and Davies R. W. *Materials...* P. 35.

<sup>50</sup> Naum Jasny who was trained as a pre-revolutionary lawyer and served the Soviet state as a consultant on food policy in the 1920s, writes that Groman was among those who were Menshevik “by reason of their mode of thought” and thus among the opponents of Lenin, Stalin and their collaborators. (Jasny N. *Soviet Economists*. P. 3).

<sup>51</sup> This predecessor to Popov's organization, the “Statisticheskii komitet” was ritually and regularly maligned by Popov and others. For an example see Kaufman A. *The History and Development of the Official Russian Statistics // The History of Statistics. Their Development and Progress in Many Countries* / John Koren, ed. New York: Franklin, (1918; reprint, 1970). P. 469–534. The reputation of the Statistical Committee has improved with age – as the reader who examines the statistical sources of many economic and social histories of pre-Revolutionary Russia will see.

promptly proposed that resources should be devoted to preparing a balance sheet detailing the inputs and outputs of the entire national economy.

Over the course of the next half-dozen years both Popov's and Groman's voices and pens were always on the side of those who argued for the evolution of state power into an economy-integrating, organizing and allocating system. This was envisioned as a system that, on the basis of accurate quantitative data, was capable of setting today's economy into a development continuum, one that moved from foundations in the past rationally and, above all, efficiently into a high-productivity future.

They had their work cut out for them. When GOSPLAN was created (1921) it had no executive authority over firms, let alone the entire economy and it could not, therefore, create an enforceable plan even if it had had the technical and information resources to do so. Executive power over banks, trusts, and large enterprises resided with VSNKh.

Groman joined GOSPLAN in 1922 and immediately began lobbying for the development of a detailed statistical overview of the entire national economy, the "balance sheet" of the sort that his erstwhile colleague, Popov, as chairman of the Central Statistical Administration, also wished to create. The reader should keep in mind that, in terms both of data collection and methodology, this was an enormously ambitious project for its time. A balance implied a detailed quantitative narrative of beginning stocks at a specific time, output and consumption across all sectors of the economy, and ending stocks for a specific period of time. This required detailed data on all inputs to the entire economy (agriculture, mining, manufactures, services and so forth), a complete quantitative census of inventories available at a specific point in time, as well as detailed data on the subsequent distribution across the entire system of both inventories and production, ending with quantitative details describing final inventories.<sup>52</sup> Methodologically, the challenges were daunting. Decisions about how data should be sampled, how services should be categorized and valued, the quantitative assessment of banking activities, and, of course, of agriculture had to be made. In spite of the early interest of people such as Edwin Gay, there would not be a balance of the national economy in the United States until Wassily Leontief, who was a native Russian student of economics and an engaged – and rather harsh – critic of the first balance of the Soviet economy in 1925, pioneered this work as an migr

<sup>52</sup> For further details see Wheatcroft S.G. and Davies R.W. *Materials...* P. 3–15.

to the United States in the 1930s.<sup>53</sup> As it turned out, the "balance" project would also be enormously controversial in many circles and, finally, personally destructive for Groman himself. According to Jasny, he was put on trial as a Menshevik counterrevolutionary in 1931, found guilty and sentenced to prison where he effectively disappeared.<sup>54</sup>

During the mid-1920s, owing to disinterest in, or opposition to, a formal balance on the part of politicians, engineers, and other economists at GOSPLAN, Groman retreated to a focus on the "control figures," deemed essential for an annual, practical, prescriptive plan, rather than a balance, for the entire economy. Control figures were what would eventually, in input-output analysis, become the standardized exponents in a mathematical model of all components of the economy. These were the quantitative standards at which different sectors needed to perform in order to maintain an equilibrium ("balance" in Groman's and Popov's terminology) free of bottlenecks across the entire planned economy. Absent the prior development of an empirically reliable balance that specified the demands and contributions of every component of the economy at a given point in time, the control figures were bound to seem arbitrary to many professional economists.

In the later 1920s the argument that planning offered the high road to efficient economic growth had won the day. Groman's future, however, increasingly was pinned to whether that road would be mapped out by economists or by Josef Stalin – by now emerging as Lenin's successor – and his cohorts of policy makers who, if they were professionally trained, were mainly engineers. Groman fought tenaciously for the notion that planning could only be successful if the planners acted in the context of accurately detailed information about the behavior of the entire economy. Popov, meanwhile, resigned as head of the Central Statistical Administration in January, 1926.<sup>55</sup>

Particularly problematic in any attempt to conceptualize a plan was the role of agriculture.

<sup>53</sup> His conceptual and methodological critique of the Soviet balance originally appeared in "Planovoe Khoziastvo" (1925. No 12). It was published in English translation and is included in a collection of his essays as "The Balance of the Economy of the USSR. (A Methodological Analysis of the Work of the Central Statistical Administration)" in Leontief, Wassily. *Essays in Economics. Theories, Facts and Policies.* New Brunswick: Transaction Books, 1977. V. 2. P. 3–9.

<sup>54</sup> Jasny N. *Soviet Economists.* P. 61.

<sup>55</sup> Wheatcroft S.G. and Davies R.W. *Materials...* P. 38. This chapter, "A Brief History of the Balance of the National Economy" (p. 34–48), offers a lucid, well-informed narrative of the political conflicts stimulated by early Soviet attempts to create the data matrices essential to a useful economic plan.

Throughout the 1920s, the advocates of planning – whether economists or engineers – failed to demonstrate any reliable capacity to project agriculture’s role in the national economy. This is unsurprising, of course. Even today so many imponderables affect agricultural inputs and outputs around the world that projections are routinely incorrect – the principal circumstance that accounts for the vigorous survival of markets in agricultural futures.

Did agriculture require more resources and better market conditions in order to become a reliable contributor to the rest of the economy? Or, was that sector simply hopelessly out of synch with the rest of the Soviet world, requiring a complete reconstitution of rural society? Groman’s zemstvo background, his insistence on “balance,” and his scientific perspective resulted in a posture that was entirely at odds with that of Stalin and others who supported Stalin’s “general line” of intensive development of specific sectors such as machine fabrication. It was also increasingly at odds with the perspectives of experts in the Commissariat of Agriculture as attention focused increasingly on desirability of “industrializing” agriculture through the creation of large collective farms.<sup>56</sup> The result was aggressive political intrusion into the planning process. When GOSPLAN actually began to acquire executive authority, it was meant to be used as a means to insert political decisions into the economy. Groman, meanwhile, disappeared from public life in 1931 and, following a trial, was not heard from again.

### **Bolsheviks, Politics, and Planning**

The Bolsheviks’ approach to prescriptive planning was, thus, gradual and sidelong, stimulated by urgent needs and long-established precedent. On many occasions between 1917 and 1921, what can only be called “plans for planning” (such as Popov’s and Groman’s) were published by high-level bodies such as VSNKh, The Council of Labor and Defense (STO), and high-level Party organizations. These were not proposals for the planned coordination of the entire economy but for creation or restoration of specific industries or even specific components of enterprises.

Proposals for development of an electrical power generation and transmission grid offer a good illustration of the ways in which technology and politics worked together to modify the state’s approach to controlling and managing an econom-

ic resource. Plans to establish a central organization to manage a crash, nation-wide program of electrification were stimulated by the works of Ballod and Grinevetsky, mentioned above, as well as by the obvious need for electricity. That these discussions produced a centrally controlled organization, the State Commission for the Electrification of Russia (GOELRO, 1920), is indicative of the attractions that technology and centralized economic control had for each other in the eyes of political elites.

But, in the broader context, the “Soviet industrialization” debate was still about a wide range of alternatives: the mixed, New Economic Policy, the radical communization of War Communism, or something else that employed state organizations far more intensively. So far as one can tell, no one ever suggested that a Russian version of a Western-style national electric corporation should do the job of electrification or even that it should be handed over, as a set of projects, to the Councils of Peoples Economy (Sovnarkhozy), regional administrative bodies which were legacies of 1917. Electricity was an industrial commodity whose technostructure, in the early twentieth century, lent itself comfortably to centralized management. The technology necessary for long distance transmission of electricity was sufficiently well understood and the economies of scale associated with big, costly power plants were appreciated.<sup>57</sup>

The proposal to electrify was appealing to politicians and technocrats in the central government for the obvious reasons: engineers were promising to make a crucially important modern technology available throughout the entire country, even to remote areas, in a short period of time. The symbolic value, let alone the economic potential, of even one electric line installed by the new government into thousands of small Russian towns beggars imagination. But the proposal also appealed to engineers and technocrats, both in and out of government because of its inherent rationality and apparent manageability, not to mention its promise of enhancing the status of every engineer in the country. Such a proposal, moreover, lent itself readily to the kind of technology-savvy, modern-oriented propagandizing of which the Communist Party and the Soviet state eventually became world-class masters.<sup>58</sup> Even though this was a state project, engineered and financed in much the same way as the Trans-Siberian railway, Bolshe-

<sup>57</sup> Coopersmith J. Electrification. P. 87–98.

<sup>58</sup> Kenez, Peter. *The Birth of the Propaganda State. Soviet Method of Mass mobilization, 1917–1929.* New York: Cambridge University Press, 1985. P. 121–144 and see the illustration on p. 128: “Electrification and Counter-revolution.”

<sup>56</sup> Jasny N. *Soviet Economists.* P. 158–179.

vik propaganda easily transformed it into one of the wonders of the world of the future: “Communism,” after all, was “Soviet Power plus Electrification.”<sup>59</sup>

This technocratic model – specifically the experience of creating the plan and of organizing the necessary combination of Party, industrial, technical/engineering, bureaucratic and public elements behind it – became a foundation stone of the power tactics and the rationales that would have to be combined to create the planned economy policies.<sup>60</sup> But the electrification program wasn't merely a case of “models” and a bank of experience for later withdrawals. The Tsarist-trained engineer, Gleb M. Krzhizhanovsky, who headed and organized the new GOELRO, eventually became the first chief of GOSPLAN when it was created almost exactly one year after the initiation of GOELRO.

Plans for preferential development of specific industries or of specific segments of industries – the Stalinist strategy that became known as the “general line” – inevitably raised problems of inter-sectoral competition for economic inputs and bottlenecks across the entire economy as Groman predicted. Just as inevitably there were calls for the creation of an organization whose exclusive responsibility would be to coordinate the planning for the entire economy with or without the “balance” upon which Groman insisted. The technical and political problems that this concept implied would not be fully realized for some months.

### The Evolution of Planning into State Autonomy

Yet it did not require political genius, even in 1920, to understand that, while technocrats and engineers may have thought of it as “value free,” the concept of a central plan was very much a concept about governance – state capacity and authority – and that centralized planning could make some of the planners very powerful.<sup>61</sup> In particular, even the most superficial consideration of the role of food and technical agricultural inputs into such a coordinated industrial system (recall that Groman and Popov were zemstvo economists both before and during World War I) immediately raised the problem of the

<sup>59</sup> Lenin V. I. Our Foreign and Domestic Position and Party Tasks (November 21, 1920) // Collected Works. 4th English Edition. Moscow: Progress Publishers, 1965. V. 31. P. 416.

<sup>60</sup> Zvezdin Z. K. Ot plana GOELRO k planu pervoi piatiletki. Moscow: Nauka, 1979; but see, also, Coopersmith J. Electrification. P. 139–147.

<sup>61</sup> On engineers' belief in technical solutions free of social values and political preferences see Coopersmith J. Electrification. P. 139–147.

market independence of the Russian peasantry. It was but a short step from there to anxiety-provoking questions about how to include peasant agriculture in the plan, where the authority to allocate capital to the rural economy would reside, how labor would be allocated, and whether a comprehensive plan would be prescriptive (i.e. requiring executive oversight and authority) or merely predictive.

That these considerations, taken all together, did not reach an acute level of political debate for some time was owing to several factors. Lenin, following prolonged illness, died in January, 1924. While his authority was broadly undiminished even during illness, he was unwilling to engage the most politically sensitive of these issues. He was inclined to leave planning to engineers and characterized some of the most ambitious proposals of the economists as “ignorant conceit.”<sup>62</sup> And, as noted above, when GOSPLAN was created, it was explicitly established as an entity separate from VSNKh and, therefore, without administrative authority over any segment of the economy. Nevertheless, as bottlenecks continued to plague recovery and, especially, as economic growth began to slow, lines of confrontation were sharply drawn.<sup>63</sup>

### Planning and the Clash of Institutionalisms

Historically linked in the view of non-professionals to specific, sometimes highly touted, development projects, Russian planning tended to become the province not of economists but of engineers. GOSPLAN, as noted above, was initially headed by an engineer (Gleb M. Krzhizhanovsky) who had been in charge of the electrification program, GOELRO, and much of the senior apparatus of both VSNKh and of GOSPLAN were divided between professional Bolshevik politicians like G. L. Piatakov – another planning activist – and professional engineers.<sup>64</sup> It was the en-

<sup>62</sup> Pravda, February 22, 1921 quoted in Carr E.H. Bolshevik Revolution. V. 2 P. 376.

<sup>63</sup> For summaries of the major positions see Preobrazhenskii E. A. The Crisis of Soviet Industrialization. Selected Essays. Edited with an Introduction by Donald A. Filtzer. White Plains, NY: M. E. Sharpe, 1979 and Day, Richard B. Leon Trotsky and the Politics of Economic Isolation. Cambridge UK: Cambridge University Press, 1973. P. 69–152.

<sup>64</sup> Piatakov was, during the 1920s, a major force for integrating all industry under the control of VSNKh. In doing so, he argued that VSNKh must undergo a “perestroika”. As early as 1926 he was proposing a five-year plan for Soviet industrial resurgence. See Graziosi, Andrea. Building the First System of State Industry in History. Piatakov's VSNKh and the Crisis of the NEP, 1923–1926 // Cahiers du Monde Russe et Soviétique. 1991. 22, 4 (October–December). P. 539–580.

gineers who, in cases such as GOELRO, where plans were actually devised and placed in operation, tended to control not only the process but the planning.

Did the fact that early Russian planning was the product of an alliance between politicians and engineers, instead of economists, make a difference? Evidently. If one were to compare the critical roles that economists, such as Groman, played in the mid-1920s with those of engineers, the engineers would emerge as more immediately goal oriented, perceiving the targets of their professional responsibility as components of closed systems, and driven by a “can do” attitude not unusual among engineers.<sup>65</sup>

The economists, by contrast, were emerging out of an institutionalism that was only gradually and cautiously preparing them for the practical application of their knowledge: the era when they would routinely be consulted by political bodies for policy suggestions could hardly be said to have dawned. Russian economists broadly shared the view of state elites and students of Marxism that the economy was a tool available for use in social and political development. This point of view, however, was not an adequate foundation for taking measured steps to apply economic resources in specific cases. The task, instead, required huge steps forward, in their view, in conceptualization, data acquisition, and mathematical analysis. The absence of sophisticated quantitative skills in the 19<sup>th</sup> and early 20<sup>th</sup> century from economists’ professional toolboxes, together with the large data problems discussed earlier, were perceived as serious obstacles. But, the proprietary attitudes toward the economy both of state elites and economists exerted its influence here and accounted for disagreements within GOSPLAN over appropriate strategies for responding to politicians’ and engineers’ demands to move forward.

That central and prescriptive planning was installed only gradually as a permanent fixture of post-Revolutionary society in the 1920s demonstrated the uncertain and complex nature of early plan proposals. But the establishment of the plan as a device for controlling and stimulating economic growth simply underscored the underlying, necessary condition for its implementation – a powerful, centralized state administration capable of exercising the proprietary rights of autonomous capacity

<sup>65</sup> On engineering’s goals and achievement orientation see Vincenti, *Walter What Engineers Know and How They Know It*. Baltimore: Johns Hopkins University Press, 1991; on the special frustrations facing ambitious members of the early Russian techno-structure see Bailes K. E. *Technology and Society*. P. 36–43; on engineers’ proselytizing behavior supporting technological applications, see Coopersmith J. *Electrification*. P. 92–98.

and authority over the national economy. That such a state system did not exist in 1920 necessarily made effective prescriptive planning impossible, with or without data, with or without a “balance”. That such a state system was gradually reconstructing and that there were political elites who were prepared to use it during the post-revolutionary decade did not resolve the economists’ dilemmas but it did start to create the base which the engineers and planning activists required.

State and private monopolies, state control of, or detailed involvement in, banking, in enterprises in some branches of the economy, and in development finance were all established components of the Imperial Russian political economy before 1914. Individuals who were experienced in the centralized coordination of very large-scale infrastructural activities had been active in Russian government long before the Bolsheviks were a meaningful force in politics.

The long-standing differences between indigenous manufacturing and commerce in such industries as textiles and processed foods and the large-scale, heavy manufacturing stimulated beginning in the nineteenth century by St. Petersburg for national security reasons began to disappear in the post-1917 era.<sup>66</sup> But the emergence of both the Tsarist trusts and syndicates and the early *glavki* already heralded homogenization of manufacturing. For closely held industries such as textiles and food processing, these policies did not at once undermine local autonomy. Many of these industries – not only those in Moscow but others in the Urals and along the western borderlands – had long-standing connections with the regions around the country in which they operated. They had developed relatively independently and they manifested indigenous impulses to industrialization that ante-dated active state involvement in industrialization.

Beginning with the creation of the *glavki*, however, centralized administrative oversight seems to have eroded both the private entrepreneurial nature of these enterprises and their close ties with their traditional localities in the Russian Empire. For example, the Sugar Trust (Sakharotrest) oversaw 276 refinery enterprises that depended upon the cultivation of more than a million acres of sugar beets. On paper, at least, this was an integrated organization with a substantial bureaucratic structure in Moscow. From 1922 there were nearly 400 staff-level employees in Moscow subject to the direct oversight

<sup>66</sup> See Malle S. *Economic Organization*, Chapter 2 and Chapter 2 Appendix for an excellent description.

of VSNKh.<sup>67</sup> The Moscow staff were responsible for gathering the data necessary for preparing industry production plans and verifying their fulfillment.<sup>68</sup> With the institution of a comprehensive, prescriptive plan, such homogenization would necessarily become the rule across virtually every enterprise in every industry in the economy.<sup>69</sup>

The Bolshevik approach to the mobilization of capital also stood as a special case of the extension of autonomous state power into development. Owing both to decisions by the state to abrogate responsibility for billions of rubles of Imperial international debt and to European perceptions of the Soviet state as renegade, virtually all development capital, beginning in 1917, had to be raised from within the national economy. This policy could easily have resulted in a return to the programs of money supply manipulation that characterized tsarist finance in the 18<sup>th</sup> and 19<sup>th</sup> centuries and that characterize the financial policies of many developing economies to this day. And, in fact, until the currency reform of 1924 some Bolshevik politicians were determined to use currency inflation, the printing press, as the “machine gun of the proletariat, mowing down the moneyed classes.” The discipline re-introduced by the restored state bank and Sovnarkom in the mid-twenties, however, returned planning and enterprise administration by the state to the disciplines of the Vyshnegradsky-Witte era and what became an extreme reliance upon the national economy for the resources essential to development investment.

The single, unified plan and its underlying administrative and capital mobilizing strategies could not have been executed as prescriptive policies in the 1920s without such a strong center. At the same time the strong center benefited from the large-

scale, mass production technologies upon which it chose, finally, to focus. The conflict between engineers and economists was a disagreement over the emphasis that the new calculus could give to these special technologies in the context of available data and methodology. It was also a disagreement over whether politicians or the economy (as interpreted by professional economists) would determine critical details of economic policy. Did the economy have to develop in balance? Or could specific sectors, such as machinery, be singled out for investment while others, such as consumer goods or agriculture, were subordinated and even starved? Ultimately, the politicians and engineers prevailed. “Gigantomania,” the aggregation of ever larger, centrally controlled manufacturing and commercial bureaucracies, became a key policy in the formulation of the new calculus of power that, as Wassily Leontief wrote in emigration, was a “rule of thumb” network of tactics rather than a carefully reasoned economy-wide strategy.<sup>70</sup>

One could argue, then, that there were changes to the institutionalized rules of the game of organizational behavior governing development policies after 1917. Certainly, industrial homogenization, capital mobilization, and the victory of engineers in their competition with economists illustrated this. And, while, there was considerable evidence of officials’ “embeddedness” into imperial private enterprise at the beginning of the twentieth century, the extreme degree of state control that VSNKh made possible was unprecedented. Still even these new rules of the game were extensions of patterns that were already in train and readily identified before 1914 just as their reliance on the restored, increasingly powerful, increasingly autonomous centralized state apparatus was.

<sup>67</sup> RGAE. F. 1576. Op. 8. D. 22.

<sup>68</sup> RGAE. F. 1576. Op. 7. D. 3.

<sup>69</sup> Malle S. Economic Organization. Chapter 5.

<sup>70</sup> Leontief, Wassily The Decline and Rise of Soviet Economic Science // Foreign Affairs. 1960. V. 38. No. 2 (January). P. 261–272.

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