- *How not to Network a Nation: The Uneasy History of the Soviet Internet.* By Benjamin Peters. Cambridge, Mass.: MIT Press, 2016. xiii, 298 pp. Appendixes. Notes. Bibliography. Glossary. Photos. \$38.00, hard bound.
- *Liberal.ru: Internet i ideologicheskie dvizheniia v Rossii: Kollektivnaia monografia.* Ed G. Nikiporets-Takigava and E. Pain. Moscow: Novoe Literaturnoe Obozrenie, 2016. 478 pp. Appendixes. Notes. Photographs. Figures. Tables. RUB 494, hard bound.

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In two important books, Runet (the Russian internet) is the central character, an essential component of the politics of commerce, economic policy, and strategic thinking. The first, written by an American specialist on information policy and the interaction between society and technology, looks back to the Soviet era, at the prescience and then failure of top Soviet scientists to introduce the networked society ahead of their American counterparts. The second is a collaborative work of Russian social scientists with an extensive agenda to identify, using discourse analysis, the principal political groups posting in "communities" of the like-minded in "VKontakte," a large heterogeneous social media site combining personal interactions and extensive blogs within self-organized "communities." The second half of this book differs substantially: Lev Gudkov, senior analyst at the Levada Center in Moscow, looks at the country as a whole through a different lens—a large number of national surveys gathered over the course of the Center's activity. The first book chronicles the ambitious proposal by leading scientists to network the whole country in the service of the Soviet Union's ideologically-based command economy. The second reveals a country riven by multiple, mutually incompatible ideologies espousing "anti" or negative platforms with little ideological heft until Vladimir Putin's campaign to arouse a nationalist or, as the book puts it, an "imperialist syndrome" with the "return" of Crimea.

In *How Not To Network A Nation: The Uneasy History of the Soviet Internet*, Benjamin Peters uses archival material, memoirs, interviews with descendants, and thorough scholarship grounded in his expert knowledge of information systems. Throughout, there are sections devoted to "context," which can stretch back to European, American (especially the great thinker, Norbert Wiener), Russian tsarist and early Soviet times, as well as capsule descriptions of key concepts in information technology, Soviet institutions, and acronyms for components of the information system

The story Peters tells is compelling. A constellation of exceptional mathematicians and economists continually and devotedly devised iterations of a networking plan for the country. It would be expensive and bold; it would reform the economic planning system and pose a challenge to bureaucracies of longstanding power and status. Importantly, the scientists were not dissidents. On the contrary, their goal was to enable the command economy to overcome its often-paralyzing flaws. Although the Soviet Union declared itself a planned economy, with hierarchically organized rational decisions guiding

*Slavic Review* 76, no. 1 (Spring 2017) © 2017 Association for Slavic, East European, and Eurasian Studies allocation of resources (unlike the perception of capitalism's profit-driven mechanism for private gain), in fact, planning was decidedly faulty, spotty, neglecting some sectors and focusing on economically-strategic ones. Even the relatively small steps in the 1965 Evsei Liberman economic reforms (supported by Premier Aleksei Kosygin), which might have expanded information on price and profitability, were blocked by bureaucrats. The Soviet economy was also victim to the strict segregation of military and civilian economies, which prevented the benefits of spillover effects, unlike the practice in the United States civilian economy, where growth was strengthened by innovations generated by military projects. The Soviet military economy was a nonsharing, resource-devouring sector.

Fully planning an economy was, in any case, an immense and impossible undertaking. The Russian-born economist, Wassily Leontief, during his work at Harvard, used its powerful early computer for large-scale quantitative research to construct his famous table, a method to eventually factor in all resources for needed outputs. Changes in outputs would, in turn, be backward-designed to assess the associated changes necessary on the input side—a systemically-connected planning instrument. The vision of this nascent graphic system, unthinkable until the power of the computer came into existence, attracted the attention of the reforming scientists.

The heart of the book, Chapters 4 and 5, details the fight for a networked system: a fight against entrenched bureaucracies, powerful party figures, and pusillanimous superiors. Anatoly Kitov, Vasily Nemchinov, Viktor Glushkov and others fervently supported the creation of a network in order to solve the problems of irrationality, instability, and inadequate information flow. The introduction of the computer could, they were convinced, make the plan work and reduce or eliminate its inbuilt weaknesses. By the end of Chapter 5, even the scaled-down network plan had been slashed to a trivial fragment, far from the scientists' initial project of a "national network ... to provide 'collective access,' 'remote access,' [and to] 'input,' 'receive' and 'process data' ... [a] decentralized network ... [in which] information for economic planning could be transmitted, modified, and managed in relative real time up, down, and laterally across the networked administrative pyramid," with 20,000 computers at the base and a "central planning processing center in Moscow" connected by high-capacity data channels (109). The transformation of planning could be a powerful, if expensive, remedy for the considerable shortcomings of the Soviet planned economy. Not unusually, the ministries and agenciesthe planning bureaucracy the new model was designed to improve-gutted it.

In the second book reviewed here, Galina Nikiporets-Takigava and Emil Pain have collaborated to edit a book in which a number of large-scale research projects, with detailed attention to methodology, mine Runet posts in VKontakte communities and, separately, Tweets for a representation of the main ideological divisions and trends in Russian society from 2011–2014. The book is divided into the Russian winter, a period of "political modernization," and a Russian spring, a period of "political reaction and stagnation." These two principal editors collaborate on some chapters, some are written by Nikiporets-Takigava alone or in collaboration with Sergei Fediunin (graduate student at the Institut National des Langues et Civilisations Orientales, Paris) or Sergei Prostakov (graduate student at the Higher Economic School, Moscow), and some by the latter two. Basing his chapter on different methods, Lev Gudkov contributes analysis of a time series of national opinion surveys.

Nikiporets-Takigava analytically separates four main ideological streams in today's Russia: "conformists" (Putin's ideological supporters plus careerists and status- and financial-beneficiaries of the regime); nationalists on the far right; leftists on the extreme left margin; and liberals, representing—as is historically characteristic—an indefinable mixture of libertarian ideology, democratic principles, propensity to protest, and support of an imprecise notion of civil society. The title of the book begins with *Liberal.ru*, but it is liberals who are fewest, most diffuse and whose only unifying ideology is to be "against": "Consolidation of the liberal community of Runet has primarily a negative character," (201). Positive elements of their ideology stand for vague notions of "modernization" of society and a political system modeled on western Europe and the United States. The steep decline of messages of mobilization by the time of "spring" speaks to the retreat of liberals from "acts of action" to "acts of thought," (223). One might add that the continuing inability of liberals to merge in order to form a larger party that would be much more likely to have at least some presence in the Duma repeatedly reveals their inability to compromise.

Nationalists come to the fore with renewed energy after the annexation of Crimea and the proclamation of breakaway republics in Ukraine. This is their time. Their unifying sentiment echoes the Kremlin's propaganda: defending Russians anywhere, an ideology that fits well what a later chapter calls the "imperialist syndrome." Leftists, aiming to reestablish Soviet values, retain their unwavering ideological principle—egalitarianism—but appear to have decreasing appeal and unity. In fact, ideological unity is largely absent in all groups, except at a level of generality with little practical political purpose.

A short chapter on propensity to protest is based mostly on Tweets. The author notes that "thousands of views" were recorded and had a "strong mobilizational effect, helping people to get out on the street," (202–3). Perhaps, but hard evidence of the psychological or any other mechanism driving individual decision-making is not provided. Stimulus-response is asserted, underestimating a long and difficult psychological process of moving from exposure to support of material read on Twitter to actually taking to the street under conditions of highly uncertain safety and likely repercussions. Tweets could be a topic for further research on this chain of exposure, cognitive processing, and activation, as well as the power of affect in stimulating rational thinking.

Lev Gudkov's long chapter introduces an entirely different methodology. The subject is Russian public opinion not specifically related to Runet use. His data are drawn from years of national surveys by the Levada Center (and before that, the original VTsIOM, the All-Union Center for the Study of Public Opinion). The surveys yield profoundly pessimistic results: they show a country divided by class, adrift in meaningless versions of ideologies. They have no "vision of the future." The public arena has been taken over by the government. There can be no place or motive for public discussion and no solutions proposed by civil society: "the sterilization of the public space leads to stagnation in public life and mass indifference to politics," (353). People who say they identify with an ideology very often have no idea what it is, mixing in pieces of various impressions along the political spectrum. The cultural and intellectual elites have no real voice and are understood by non-elites to be part of the system. Most people are dissatisfied with their ruler, but do not express it in open public form or political activity because of remembered fear from the past and lack of perceived alternatives. Putin's very high approval or popularity ratings are usually taken to mean a population strongly supporting him and his actions to increase control within Russia and his use of force beyond the country. Over time, Gudkov finds that the total positive rating of Putin in national surveys has practically always been less than the sum of indifferent and uninterested respondents, even though the positive ratings considerably exceed the negative ones—a significant finding that should lead to reassessment of the basis to evaluate Vladimir Putin's exceptionally high positive ratings. The wording of the question provides more interpretable dimensions of popularity than the binary "like/don't like" or "approve/disapprove."<sup>1</sup>

Russians, he finds, are isolated from information and flooded with propaganda. Only with great difficulty do they understand the cause and purpose of western sanctions (while the decline of oil prices is comparatively straightforward.) Eventually, Gudkov believes, living standards will be seriously affected and the reasons will have to be explained, but this conclusion is weakly hopeful and seems a long way off for a political environment in which multiple points of view are usually suppressed.

These are books packed with important analyses, data, and the experienced judgment of experts. They should both be read; through them, the picture of Russia becomes more complex, penetrated by countervailing forces and contradictions and deeply divided, with highly unequal levels of deprivation and growing social and political tension. Its citizens are burdened by a profound sense of absence of alternatives and, therefore, lack of agency.

Both books regard ideology as central to the thinking of Russia's leaders and ordinary citizens. Ideology, as a system of beliefs, attitudes, doctrines, views of political and social goals in individuals and on the policy agenda, is significant. Attempts to introduce an information network in Russia, as Peters tells us, was not an attempt to overthrow the system, but rather, the opposite: belief in the Soviet socialist project inspired these scientists to improve it, to make it work. They were ideologically compatible with the socialist mission.

1. Approval questions in Russian surveys vary in their wording. The data to which Gudkov refers are taken from national surveys from 2001–1014, in response to the question: "With what words would you mark your attitude to V. Putin?" (336):

Admiration Like I can't say anything bad about him Neutral, indifferent Suspicious I can't say anything good about him. Antipathy, Disgust

(not reported are no answer, which varies little, from 1-3%).

Their work ran into conflicting understanding of that mission, hardened into bunkers of ministerial and high-level party power. Contemporary ideologies in Russia, as the Nikiporets-Takigava edited book shows, appear in a variety of forms and are different from the socialist project of the past. They are fragmented and internally contradictory, while the current power holders embark on a plan to weld them together under the shield of nationalism, a substitute but essentially exclusionary ideology for a multinational state. Supporters of constitutional-democratic government are a distinct minority and themselves have an inadequately articulated ideology and insufficiently broad means of communication with which to bring ordinary people, with their ordinary problems like household management and acquiring goods for basic needs, into the fold. The socialist ideal of egalitarianism, the Nikiporets-Takagava and Pain book shows, remains the ideology of the far left, but far from standing for continuation of Soviet goals, as they did initially, the left has retreated.

Analyzing a large number of Tweets related to protests (with a detailed methodology included in the text), Nikiporets-Takigava finds that ideologydriven Tweets occupied a space far greater than Tweets relating to actions and provision of information. With respect to the extensive liberal-organized protests, Tweets expressing disapproval of Aleksei Naval'nyi significantly exceeded the number in his favor, and Tweets' disapproval of the protests themselves were considerably higher than supportive ones.

Within groups are conflicting definitions of their own ideologies, and the VKontakte expression of them continues to decline. The west's preferred ideological identity is the weakest in the immediate term, and none has an interpretable, systematic set of principles and strategies.

A somewhat different tension between sets of values also runs through both books, in rather different forms. Peters claims that it was corruption that damaged economic planning in the Soviet Union. Corruption also sank the computer networking rescue plan. Corruption was certainly part of the problem and continues to be an even greater factor in contemporary Russia, contributing not only to economic problems, but also to the demoralization of citizens, whose exposure to corruption at all levels is unchecked by predictably- and impartially-functioning institutions of law and justice. A macroscale analysis, briefly summarized in the book, would have been more helpful in a more comprehensive framework. A notable deficiency in the Soviet era was the undercapitalized economy, in which exhortation and labor inputs were believed to be massive enough to substitute for strained capital input. Yet the plan was specific and demanding, and the only way to avoid failing to meet output goals was to engage in gray activities, among others, acquiring crucial materials from another plant in return for other kinds of needed supplies. These illegal activities served to "lubricate" an otherwise unviable plan.

At a more abstract, societal level, the tension between "private" and "public" is considered by both Peters and the Nikiporets-Takigava collaborators as a tear in the societal fabric. In Peters's argument about the conflict between "private" and "public," he maintains that the formal organizational hierarchy of an institution tends to consider most critical the interests of the institution and its leaders, an example, he writes, of private interests undermining a public institution. However, informal parallel behavior is common in institutions; the "rules of the game" may not be the company or ministry handbook, but rather unwritten methods of navigating informal practices. It is not the same as extraction of resources for individual illegal enrichment. There is no guarantee that informal rules will support organizational goals of formal hierarchies. It is the critical role of leadership to adjust dissonance.

The tension Peters sees in public versus private orientations in a state-run economy brought to mind for this reader an additional perspective, illustrated by recent inter-service rivalry in the United States. During the war in Iraq, journalists were invited to "embed" themselves in military operations. As a result, ground troops gained prominence carrying out missions and protecting journalists. Whereas coverage of the Gulf War was a marvel of planes and precision bombing shown by a camera mounted on the aircraft, the war in Iraq featured a different military service also vying for the support of the public, the press, and budget increases. Advancement of the organization in each case is not a private versus public conflict, nor is it exclusively about drawing attention and resources to one's organization. Different models, informal and formal rules of the road, operate simultaneously. That the ministries and the Communist Party rejected Glushkov's revolutionary and costly planning reform testifies to a serious difference in defining the public good. The fate of Nikolai Ogarkov represents an instructive case of this kind of conflict.

Toward the end of the Soviet Union, Marshal Nikolai Ogarkov, as Chief of the General Staff, advocated a new type of military structure and strategy for what he considered to be the new face of future wars. His model military unit would be flexible, move quickly, operate in relatively small groups and with substantially more modern arms. Like the network proposal, it would be costly. It assumed that a war in the future would be very different from the huge military ground force fighting on extensive fronts associated with the past. It was thoroughly revolutionary, and Ogarkov was summarily fired by Konstantin Chernenko. The west, however, recognized the brilliance of Ogarkov's plan and its assumptions. Thus was born the Revolution in Military Affairs (RMA) that changed military technology and strategy in the west. A small, well-funded unit in the Department of Defense had significant independence in choosing handsomely funded projects. Looking for major new ideas, it had backed the creation of the ARPANET, a precursor to the networked American society, and supported adapting Ogarkov's plan to restructure the concept and organization of war-fighting for U.S. military forces. Was the Soviet decision to dismiss Ogarkov and his ideas a triumph of the private over the public? The Defense Ministry and officers had experienced the importance of multiple fronts in WWII. They knew that masses of soldiers manned a front and that heavy weaponry (as opposed to Ogarkov's idea of relatively light, quickly movable arms) was the backbone. The ministries were obsolete institutions replaying repeatedly the only scenario they knew and defending their turf. The huge deficit of trust in the Soviet Union made it impossible to breach the wall of protective negativity.

These were all institutional failings of a government of decreasing flexibility and failing economic performance, and of calcified bureaucracies and their aged leaders putting forward timid and partial innovation. More recently, it has become common and obvious for post-Soviet successors to pursue private gain, strip assets, and fail to plough revenue back into investment to sustain enterprise growth.

Both of these original and noteworthy books leave the reader with a deep sense of immutability, of fixed reality. One is a case study of a dramatic innovation crashing into the bureaucratic wall entrusted to keepers of the status quo, with no apparent sources of change in sight, partially because the study follows the innovators and is less attuned to small and subtle attitudes and behaviors of those with whom they interact. In *Liberal.ru*, changes can be seen among the posts in VKontakte. Online profiles provide some information about the individuals who are posting, but not yet enough to link message content to independent, explanatory factors. That addition could highlight sources of possible change and the dynamic of movement; stasis is not really possible in politics. Lev Gudkov's analysis in the same book portrays a politically numb populace that is not unthinking, but choosing arenas of greatest personal importance and avoiding public political discourse from a combination of remembered fear and the overwhelming weight of immediate concerns: family welfare and immediate surroundings. Russians believe, he finds, that they have no influence over any policy or choice and, in any case, see no political alternatives. Politically charged questions often produce significant numbers of "don't know, can't answer, don't follow the issue," and even "never heard of it." Tellingly, the response rate for surveys has plummeted in Russia, and pollsters produce missing data based on extrapolation from types of respondents who do answer, a problem in the United States as well, though probably more frequently from "polling fatigue." Gudkov sees an uninformed mass, deliberately kept information-poor by the state's monopoly on television news. The only real source of change he sees is vague: that when the economy declines too much more, the population will not be placated by their leaders.

These valuable books produce a much-needed picture of Russians as realists remembering bureaucratic obstruction and personal risk during the Soviet era, linked to the continuing elimination of alternatives in the Putin era. The extreme wing of the left has only remnants of the Soviet ideology; nationalists on the right, join in jingoistic slogans and derisive comments about non-Russians, on some occasions tied to violence. Neither right nor left can claim a strong guiding ideology for the future. The failure of liberals to connect with the public is largely a product of their own making. It is difficult to stake out and articulate a position intelligible to and relevant for all social classes. It is more challenging to craft specific alternative communications, both positive and substantive; it is vital for them to broaden the base of support. These two well-researched and clearly written books address issues and attitudes essential to an understanding of Russia in Soviet times and at present.

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