[Gregory, Asmolov](#)
Dynamics of innovation and the balance of power in Russia

Book section
(Accepted version)

Dynamics of Innovation and the Balance of Power in Russia

Gregory Asmolov, London School of Economics and Political Science

Introduction

In recent years information technologies have played a variety of different roles in social and political movements. Information and communication technologies (ICTs) suggest new ways of manifesting both symbolic power, for example new ways of framing and agenda setting, and material power, for example new opportunities for simplifying the organization of collective action. Manuel Castells explores the role of ICTs in power relationships through the notion of mass self-communication. According to Castells (2007: 251), mass self-communication is a "building of autonomous communication networks to challenge the power of the globalized media industry and of government and business controlled media" and, more generally, "the capacity by social actors to challenge and eventually change the power relations institutionalized in society." (2007: 248).

The purpose of this chapter is to analyze the Russian protests of 2011 – 2012 as a case study for examining the role of ICTs in the relationship between authoritarian power and citizens. From the mass self-communication perspective, the protests suggest another case study of the role of ICTs in the emergence of political counter-power. In this case, the question that should be asked is to what extent the application of a particular technology was able to challenge the balance of power. This chapter, however, suggests that an analysis of the role of ICTs role in political and social mobilizations should also focus on the process of emergence of new tools, rather than on analyzing functions of particular applications and platforms. Examining the dynamics of the process can help to understand the role of ICTs in a particular sociopolitical environment and to respond to the question of whether ICTs erode or strengthen authoritarian power. The process under investigation is political innovation, in other words the capacity of participants in a political conflict to create new tools that seek to challenge or protect the balance of power. Addressing the dynamics of political innovation requires us to address the following questions:

1.   To what extent are oppressed groups able to adapt to new political challenges and introduce new tools, doctrines and forms of organization?

2.   To what extent is a government able to introduce or respond to innovation?

3.   What is the nature of the dynamic in a balance of power, and do ICT innovations favor one side or eventually preserve the status quo? Does innovation suggest a temporary advantage for a particular side or does it lead to permanent changes in the balance of power?

There are a several reasons why Russia, and in particular the Russian electoral cycle of 2011 – 2012, provides a good case study for the analysis of the political innovation process. First, Russia provides a fruitful environment for innovation due to the relatively high penetration of the Internet and the degree of ICT literacy, especially in the big cities which are considered to be where the politically active middle class lives. Second, historically, since the end of the 1990s, the Internet has had a consistently significant political role in Russia. While the traditional media, and in particular television, are controlled by government, the Internet remains a relatively free space. Unlike the traditional media, the Russian online space has tended to have a more oppositional agenda and to suggest a contestatory framing of political events (Etling, et al. 2010). In addition, Russian Internet users have already had experience of using online tools for the facilitation of collective actions to address social issues (Machleder and Asmolov 2011). Third, the period between the two rounds of voting in December 2011 and March 2012 constitutes a timeframe with a high concentration of political challenges and this served to accelerate the innovation process.

A Framework for the Analysis of Political Innovation

The role of innovation in the balance of power between the sides in a conflict is analyzed in the field of security studies, and particularly in terms of the Revolution in Military Affairs (RMA) concept. One of the questions for RMA concerns when a particular technology is able to empower one side in such a way that this substantively erodes the power of the other side. RMA refers to the "major change in the nature of warfare brought about by the innovative application of new technologies which, combined with dramatic changes in military doctrine and operational and organizational concepts, fundamentally alters the character and conduct of military operations." (Marshall cited in McKitrick, et al. 1995). Similarly, the analysis of the dynamics of political innovation seeks to understand the extent to which ICTs can change the nature of political conflict and lead to substantial change in a balance of power between state and protesters. In the case of political conflict, the role of innovation is significant only if it is supported by changes in the organizational and doctrinal dimensions. For instance new tools can

lead to new forms of protest. The framework for the analysis of the dynamics of political innovation suggests three layers:

a. The Structure of Political Challenges

The political environment is shaped by the structure and diversity of political challenges. Innovation is triggered, inspired and driven by these challenges. Therefore understanding the functions and dynamics of political ICT innovations requires an analysis of the structure of the political challenges. If the challenges are not considered sufficiently significant, this may mean there is a lack of incentive for innovation. In a situation of crisis and political instability, the challenges tend to become more significant. Innovation by the opposition side creates political challenges for the authorities, which may also respond with innovation.

b. The Structure of Innovation Opportunities

While innovation is led by the nature of the challenges, there are factors that may lead to opportunities being taken or cause them to be missed. Social movement literature introduces a variety of definitions of political opportunity structures. For instance, according to Garret, opportunity structures are "attributes of a social system that facilitate or constrain movement activity" (Garret 2006). In order to understand the role of ICT, we need to examine what capacity exists for using technology to address political challenges, in other words the innovation opportunity structure. That requires mapping the factors that allow or restrict innovation.

The innovation opportunity structure is associated with two factors. The first is whether the particular political challenge can be addressed through ICT-based tools. The second is whether the oppressed group has the technical capacity to develop such tools. This can include the capacity of programmers and activists to collaborate, the degree of information literacy and tech-savviness among political protesters, the level of Internet penetration, the degree of Internet freedom, the local legislation, and so on. We must also differentiate between two types of innovation. The first type is the development of original solutions by local programmers and activists. The second is the adaptation of existing solutions, including platforms, political strategies or tactics, from other countries. The latter requires the existence of "bridge persons"— a term coined by Ethan Zuckerman (2008) —who are able to take experience from one political environment and apply it to another context.

c. The Role of the Balance of Power between Protesters and Authorities

An innovation process is a chain that starts with a challenge to one side in a conflict that provides new opportunities for the application of ICT and in turn creates a challenge for the other side. The degree of challenge to both sides depends on the extent to which a particular innovation changes the existing balance of power and thus the status quo. Innovation contributes to this dynamics, but also emerges as a part of the dynamics, while any response by the authoritarian power (whether it uses technological innovation or traditional forms of power) to innovation leads to the creation of a new political challenge that can be addressed by a new innovation. Consequently, innovation is a mutually reinforcing process, where both sides may use various applications or tools to increase their own power or decrease the empowerment of the other side. Therefore, in order to follow the dynamics of innovation we need to address the interrelation between innovative solutions deployed by power and counter-power. In what follows, I present four case studies exhibiting innovation practices and technologies related to expanding the abilities for *election monitoring, the organization and mobilization street protests, the consequent coverage of protests and opposition activities*, and finally, their impact on the *political solidarity and legitimacy of protests leaders and organizers*.

Election Monitoring

Election monitoring is a common political challenge for political systems with a low degree of transparency and a high probability of voting falsifications. Monitoring seeks not only to reduce the scale of fraud, but also to question the legitimacy of elections by exposing the scale of falsifications. In recent years the use of crowdsourcing platforms for election monitoring has become common. The Ushahidi crowdsourcing platform has been used in many election campaigns, from Kyrgyzstan to Egypt (Meier 2011a). The Russian case presents the role of innovation in the emergence of multidimensional monitoring systems with a variety of ICT-based tools and platforms.

The crowdsourcing platform Map of Violations (kartanarusheniy.ru) was launched by the election monitoring NGO *Golos*. This was a website developed from scratch to address the specific needs of Russian election monitoring. Its structure included a number of special features such as expert evaluation, the rating of popular violations and the incorporation of crowdsourcing content with traditional media content. Strong collaboration with an online liberal media outlet, *Gazeta.ru*, helped to engage more people in monitoring, as well as to incorporate the results of crowdsourcing into the media agenda. *Karta Narusheniy* was able to collect thousands of messages during each election cycle. Russian citizens also actively used social networks, Twitter and blogs to share first-hand information, documents, photos and video of

violations. Citizen-based reporting and user-generated content surprise no one these days. Of greater interest is the scale, immediacy and value of the reporting. The outcome of monitoring depends on the relationship between the scale of falsifications and the capacity of citizens to cover these falsifications.

The crowd of Russian networked citizens was able to collect, post and share a critical mass of reports concerning falsifications including documents and video reports. For instance, a YouTube playlist posted after the elections included the 60 most viewed videos of violations. The capacity of the Russian networked crowd relied on well-developed Internet infrastructure that allowed users to share information online almost in real time, and on the structure of the Russian Internet space, where interconnectedness between various platforms led to the rapid proliferation of information. The significant public exposure to the scale of fraud in the parliamentary elections visibly resulted in an accelerated process of innovation in the three-month period leading up to the presidential elections. A variety of new tools for election monitoring were introduced, addressing a diversity of monitoring-related challenges.

a) New Methods for the Collection of Violation Reports

 The NGO *Golos* developed a service (sms.golos.org) which allowed the collection of reports from observers in real time through text messages. A group of activists developed, a special election monitoring application for smartphones. The application Webnablyudatel (webnabludatel.org) classified all violations and made it possible to instantly share video, photos and reports of these. Later, a Tweet Observer platform was introduced in order to create better opportunities for Twitter users to report violations.[1]

b) Data Mining and Verification of Monitoring Results

A platform, *Svodny Protocol* (svodnyprotokol.ru), was created for the collection and analysis of election observers' reports and protocols. This system presents the idea of "bounded crowdsourcing", where information is collected from a limited number of contributors who have special access to the event of interest and whose identities have been verified.

c) Mobilization of Observers

A number of platforms were created to enable any individual to become an observer. One such platform, aimed at simplifying the procedure for becoming an observer, was rosvybory.org. A

---

[1] The platform was used at regional elections in October 2012.

similar function was offered by the Citizen-observer project (nabludatel.org). In St. Petersburg, a website, Saint Petersburg Observers (spbelect.org), was launched by a group of local activists.

d) Coordination of Monitoring

Russian developers introduced *Grakon* (grakon.org), a special social networking platform for election monitoring. The purpose of this platform was to make election monitoring and coordination between various groups of observers as simple as possible.

Analysis: Election-monitoring and balance of power.

A number of actions were undertaken to reduce the impact of the Map of Violations (*Karta Narusheniy*) and other monitoring efforts. One of the authorities' strategies was to put pressure on the media. *Gazeta.ru* was forced to revoke its endorsement of *Karta Narusheniy*. Additionally, the authorities embarked on a court case against the platform, accusing it of distributing false information. Pro-Kremlin activists contributed false reports to the platform in order to demonstrate that it was not credible. A video distributed on YouTube showed how this was done and described the dots on the *Karta Narusheniy* map as a "disease on the map of Russia" (Meier 2011b). Additionally, on election day unprecedented distributed denial-of-service attack (DDoS) attacks blocked the crowdsourcing platform, as well a number of Russian online liberal media outlets.[2]. Anton Nossik, a well-known Russian Internet expert, compared this attack with the long-time Soviet attempts to block reception of foreign radio broadcasts.

As a response to the DDoS attacks, online media began using Facebook, Twitter and other media that were not affected by the attacks for the proliferation of content related to the elections (Sidorenko 2011). *Karta Narusheniy* also used Google Documents to continue collecting information. The emergency migration to alternative platforms demonstrated that the opposition and the liberal media were able to adapt to the attacks and create new patterns of information distribution.

Following the parliamentary elections, the state's response strategy changed from one of legal prosecution and DDoS attacks to a more innovative track. Following an order from Putin, a special online system for election monitoring, webvybory2012.ru, was developed. This allowed people to follow the majority of Russian polling stations (about 95,000) online on the day of the presidential election. Every polling station was equipped with two cameras, one focused on the

---

[2] These attacks cannot conclusively be attributed directly to the Russian authorities, but there is evidence indicating that Pro-Kremlin groups were involved in conducting them.

ballot box and the other giving a general view of the polling station. Once the voting was over, one of the cameras broadcast the counting of votes. The cost of this project was at least 13 billion rubles (around US$500 million).

 Opposition activists argued that the most common election violations could not be monitored by webcams. Nonetheless, the cameras did allow numerous violations to be spotted. However, this did not finally lead to reconsideration of any election results. In this case the innovation served not to increase the transparency and accountability of the voting process, but primarily to create a widespread semblance of transparency and accountability. It is also important to note the enormous gap between the costs of the citizen-based crowdsourcing election monitoring systems and the system introduced by the authorities. The opposition also tried to use innovation to overcome the limitations of the new state system. Webvybory2012 did not allow any recording mode or function which would permit complaints about violations; however a few special applications were developed by protesters in order to increase the efficiency of the state surveillance. Additionally, relying on the state system, the Video Observer platform (http://videonabludatel.org/) allowed tasks to be distributed among a network of online observers.[3]

Innovation in the election-monitoring field challenged the balance of power between state and citizens. Michel Foucault used Jeremy Bentham's concept of the Panopticon as a model for the total surveillance by a state of its citizens. Some experts argue that ICTs and the Internet contribute to a state's capacity to monitor its citizens. As we can see from the Russian case, however, in a reality where every citizen is potentially a networked broadcasting sensor the situation can also be the opposite, with an increasing number of citizens monitoring the state. Information technologies have empowered the other side of the Panopticon by creating self-organizing surveillance networks focused on the observation of the authorities (Asmolov 2011). The introduction of the Russian surveillance system, Webvybory2012, which is in fact the largest Panopticon in human history, can be viewed as the state's attempt to use innovation to restore the balance of power within the Panopticon structure through engagement of people's gaze within a state-backed network of sensors.

Innovation did not lead to a reconsideration of the voting results. However, ICTs enabled a questioning of the legitimacy of the elections and triggered political protests. Innovation in the field of election monitoring led to the emergence of new political opportunities and challenges

---

[3] The platform was used at regional elections in October 2012.

that were in turn addressed by sets of innovations in other fields. The further case studies address the other elements in the innovation chain.

Mobilization and Organization of Protests

One of the common challenges for the organization of protests is mobilizing people. Following the parliamentary elections, Russian political activists used a range of existing online platforms, including Facebook, Twitter, Vkontakte, LiveJournal and others, to mobilize participation in protest rallies. One of the most successful Facebook event pages was created by a journalist, Ilya Klishin, for a protest at Sakharov Square in Moscow on December 24, 2011.[4] More than 54,000 people joined the event page. The actual number of participants in the rally was somewhere between 29,000 (according to official police data) and 120,000 (according to organizers' data).

The use of traditional online mobilization tools, however, was not felt by Russian opposition activists to be sufficient. "The space of Facebook and Twitter became too narrow for us," says Klishin (in personal). He started a practice of creating dedicated websites for specific protest events by launching the dec24.ru website, providing up-to-date information and links to mobilization groups on different platforms, for a rally to take place on December 24, 2011. The need to expand the range of mobilization tools was also related to the structure of the political challenges faced. Organizers of protests faced pressure, including questioning, prosecution and arrest, from the Russian security services. Additionally, the authorities required legal approval for the organization of protest events. Both challenges demanded new forms of protest and new strategies for their organization – below are four such categories of new organizational forms.

a) Car protests

On a few occasions, social networks and blogs were used to organize simultaneous flash mob protests in few cities, during which people with white ribbons symbolizing the protest on their cars gathered at a specific time and location. Some of these protests attracted more than 1,000 cars. Pro-Kremlin movements later adopted the same form of protest.

b) Single Protest

---

[4] https://www.facebook.com/events/231653370237319/

According to Russian law, a protest by one person does not require special permission. An example of how this can be exploited through amplification by ICTs was provided by Olesya Shmagun, who made a poster that read "Putin, go out and take part in public debates!" and stood with this by the entrance to Vladimir Putin's office. She was questioned by the government security service, but was not detained. Later, she published the story of her protest, together with photos, on her LiveJournal blog[5]. Just a few dozen people were able to see Shmagun's protest in the offline world, but the blog post drew attention and was shared by many blogs and media outlets

c)   Large-scale Decentralized Mobilization

In February 2012, the opposition initiated the Big White Circle action (Khoklova 2012a). The idea behind this was to cover the circular road around Moscow's center (known as the Garden Ring) with a chain of protesters. Unlike the previously mentioned protests, this did not receive a permit from the authorities. Additionally, it was a particular challenge to cover the entire Ring of about 15 kilometers. A special online tool, the *Feb26.ru* website, was developed to organize this protest. This allowed people to check in at locations of their choice on the map of the Garden Ring, and showed which locations were already occupied. Unlike other protests, the Big White Circle had no organization committee or individual leader. The role of leader was played by a website. 7,843 people registered for the action and the online circle showed a relatively equal distribution of check-ins. While this would not have been enough to cover the whole circle, the actual number of participants was more than 20,000.

The action had two layers: it included people standing in the road and hundreds of cars with symbols of the protest driving around sounding their horns. The police distributed their forces around the circle, but no action was taken against the protesters. The nature of protest required the mobilization of a large number of policemen dispersed over a wide territory, therefore, it was difficult to concentrate police forces in one place. This case demonstrates how ICTs enable new forms of protest which have no clear leader, are decentralized, can bypass some legal restrictions and create new challenges for the authorities. The ideas of the protest, as well as its leadership functions, are embedded within the online platform.

d) Migration of Occupy Protesters.

Following the Russian presidential elections, protesters tried to create Occupy camps. This was

---

[5] http://shmagun.livejournal.com/43578.html

an adaptation of the protest tactics used in the US and other countries. The police attempted to close the camps and arrest the activists. As a response, activists started to use Twitter and social networks to coordinate the migration of camps from one location to another. The migration was so fast and well coordinated that police were not able to respond fast enough and follow protesters. At some point the security forces became exhausted and a camp, #OccupyAbay, succeeded in surviving in one location for a few days.

Analysis: Mobilization and Balance of Power

In order to understand the role of ICTs in a power relationship, it is crucial to examine the capacity of both sides to apply innovation to its mobilization tactics, as well to restrict counter-mobilization. One the one hand, the authorities tried to limit the opposition mobilization through a number of methods, including prosecution, intimidation, arrests, as well as DDoS attacks on the platforms used for mobilization. Later, new legislation was introduced that significantly restricted the freedom to hold demonstrations. On the other hand, the challenge for the authorities was to mobilize supporters of the Kremlin in order to show that the protesters were a minority. They used a different type of online tool to mobilize people. A website, massovki.ru, that was usually used to engage paid participants for different types of public crowd event, such as the filming of a movie crowd scene, was used for the mobilization of pro-government rally participants. However, the mobilization of pro-government crowds mostly relied on offline strategies using so-called "administrative resources", where various organizations including large factories and universities are required to send a particular number of people to a political event. For instance, this type of mobilization was used for a large pro-Putin rally at the Luzhniki Stadium on February 23, 2012 (Asmolov 2012).

The opposition response to this was on two levels. On the one hand, they continued to introduce new forms of protest, exploring the limits imposed by the authorities. For instance, in May 2012 a group of famous writers organized the *Kontrolnaya progulka* (Control walk) when thousands of people were just walking on the streets of Moscow following the writers. At another level, the activists used ICTs to question the credibility of pro-government protests. Bloggers sneaked into pro-government events and interviewed people who had been forced or paid to participate.

The Russian case represents a struggle between bottom-up strategies of mobilization by an opposition relying primarily on innovation, including technological tools and new ways of organizing protests, and top-down mobilization by a government using primarily traditional strategies, while at the same time trying to limit the innovative potential of the opposition. In

some cases, as at the pro-Putin rally in Luzhniki, the top-down vertical mobilization used by the authorities was able to mobilize more people than the bottom-up mechanisms. However, what we can see is that different strategies for mobilization create very different kinds of crowd, and the difference in nature of the two kinds of crowd may be more important than the number of people.

Case Study 3: Coverage of Protests and Opposition Activities

One of the challenges faced by opposition activists in an information environment with a high degree of state control over the traditional media is the coverage of protests. Obviously, user-generated content was widely used. However, innovation led to the emergence of new practices with greater capacity to influence framing and agenda-setting. The mobile-based, real-time broadcasting platforms ustream.com and bambuser.com were used to provide live coverage of the protests against the result of elections from the heart of the crowd. Some of the streams had an audience of more than 40,000 people at one time. A Russian blogger with the nickname *Vova-Moskva* became a "livestreamer" and provided real-time footage of protests, including clashes between the protesters and the police. At one of the protests he broadcast his own arrest. He also used crowdfunding to support his work. A member of the *Duma*, Ilya Ponomarev, broadcast live from the police station in Novosibirsk where he was detained for "illegal distribution" of his newspaper.

During the protests people detained in police cars used their mobile phones to broadcast live and to send photos. The detained participants of the rallies also actively used Twitter to update of their arrests, as well as to share information about the location of the police car taking them to the station. At the peak of the arrests, Twitter feeds were full of dozens of reports from those detained. The live broadcasting and tweeting of arrests increased transparency around the police actions. When an individual broadcast news that he had been detained, a group of his friends followed him to the police station and demanded his release. A group of volunteer lawyers was also following the information. A website, *ovdinfo.org*, aggregated information from different sources about arrests. When the number of arrests increased after the inauguration of President Putin, a political activist, Maxim Katz, created a center for the coordination of assistance to those detained, which sent lawyers as soon as information about arrests was received. The use of ICTs made it easier to hold the police accountable for their actions.

An additional challenge for the protest coverage was that of the representation of numbers of participants. The statistics on participation were highly contested, with the authorities always

giving low numbers and the organizers arguing that the number of participants was very high. A programmer, Anatoliy Katz, created the White Counter, an application that was used to count protesters. The counter was based on an analysis of the large number of images taken every second. It was used first time on June 12, 2012 demonstration. While police sources claimed that 18,000 people participated in the protests, according to the counter it was 54,000.

While participants in the opposition rallies produced a lot of online content in real time, almost no user-generated content came from pro-government demonstrations. The traditional, state-controlled media covered pro-government rallies extensively, while limiting the coverage of protests and framing opposition rallies as marginal activities. The dominant presence of oppositional content online is challenged by a number of tactics that can be attributed to pro-government interests. One of the tactics used was "hashtag spamming", where pro-Kremlin activists used oppositional hashtags to distribute pro-government information or spam. The distribution of paid content in support of the authorities or against the opposition was also a popular method in the blogosphere. Additionally, armies of bots were leaving pro-government comments on various liberal websites and blogs.

DDoS, hashtag spamming and "bot renting" could not be directly attributed to the Kremlin. However, the tactics of pro-government activists and their links to the Kremlin were exposed when a group of hackers claiming to be a part of the international Anonymous network published e-mail exchanges between a number of pro-Kremlin activists and members of the presidential administration. The contents of these individuals' mailboxes were published on a special website, slivmail.com. In this case hacking was also a part of the dynamics of innovation, aiming to decrease the credibility of pro-government activities online. This method was inspired by Wikileaks and can be viewed as an adaptation of international experience to the Russian political context.

Political Solidarity and Legitimacy of Protest Leaders

The activities of pro-government networks also included using technology to delegitimize the leaders of the opposition. For instance, the mailbox of a blogger and opposition leader, Alexey Navalny, was hacked several times. The content of e-mail exchanges were used to argue that Navalny was getting paid for serving various "enemies of Russia". Navalny's Twitter account was also hacked and hackers started writing offensive messages purporting to come from him. However, the major legitimacy challenge faced by opposition leaders was not from the government, but from within the opposition. In the Russian political environment, many citizens

have lost trust not only in government, but also in opposition politicians. The opposition forces are very diverse and divided. They include nationalists and liberals, social-democrats, anarchists, environmentalists and many more.

One of the most challenging issues for this type of opposition is coordinating activities between different factions and groups, as well as making decisions about the form and content of protests. To increase the transparency and legitimacy of decision-making around protests, the key discussions concerning the organization of protests were live-streamed on a new online channel, Networked Public TV (rusotv.org). Another tool that helped to increase trust and transparency in the organization of protests was the use of online voting to select rally speakers. However, despite claims that the nature of Internet protest is leaderless, the question of how to establish a legitimate group of leaders became increasingly relevant once the time of big protests passed and the struggle entered a routine phase. A few months after Putin's inauguration, activists decided to conduct online elections and create a "Coordination Board of the Opposition". A special concept, procedure and dedicated platform (www.cvk2012.org) were developed under the direction of an opposition politician from Yekaterinburg, Leonid Volkov.

Volkov developed a complex and sophisticated system that addressed a variety of challenges, including the verification of voters, for ensuring that every Russian citizen who participated in the process voted only once. A variety of existing online platforms were used, as well as those developed especially for voting. In addition to online voting, a network of offline polling stations was created all over the country. The Russian online liberal TV channel, *Dozhd*, provided space for debates between candidates. The system faced a number of challenges, including DDoS attacks on election weekend and efforts to compromise the system through massive participation by members of a Russian financial pyramid, MMM. Eventually 170,012 people registered on the system, 97,727 verified their identities and 81,801 voted. A board of 45 activists was selected. Once the opposition had failed to achieve an annulment of the official voting results, it had decided to create its own alternative voting system. While the outcome of the voting is still unclear, these elections were the most innovative and large-scale online political experiment to date initiated by the Russian opposition.

Conclusion

One can argue that the outcome of the Russian protests clearly demonstrates that ICTs alone cannot erode authoritarian power. The elected parliament and elected president remained in place. No political reform has begun. On the contrary, some new anti-liberal laws have been

passed. However, this study argues that any evaluation of the role of ICTs that is dependent on a specific political outcome is misguided. The definition of success of political protests depends on expectations, which can vary greatly, as well as on dozens of political and socioeconomic factors existing in a particular political context. Moreover, any "cause and effect" evaluation focuses on short-term outcomes and ignores the possibility of long-term influence.

What is important for evaluating the role of ICTs is the extent to which society is able to address challenges and a consideration of state-citizen dynamics as a whole. This study suggests that in order to understand the role of ICTs in a power relationship between authorities and opposition we need to focus not on the outcome of particular ICT applications, but on the extent to which each side is able to use ICT-based innovation to address new political challenges, and the degree to which this is capable of disrupting the status quo. This process is conceptualized as the dynamics of political innovation.

Concerning the "extent to which the oppressed are able to adapt fast to new political challenges and introduce new tools, doctrines and form of organizations", we can note the rich diversity of ICT-based innovations introduced by the Russian opposition in response to political challenges. This has included not only new tools and applications, but also new forms of protest and new organizational strategies. In some cases, like those of the Occupy migration tactics or the Wikileaks-type activities, this was an adaptation of Western strategies. In other cases, like that of the feb26.ru website, it was an original innovation that addressed particular Russian challenges and relied on local features of the protests.

In addition to opposition actors, the government also introduced some innovative responses. However, the characteristics of these innovations were very different. First, in most cases it was a response to innovation by the opposition. It focused primarily not on empowering the authorities, but on neutralizing the increasing power of the opposition. Second, some of these innovations were based on illegal methods and, while they served the interests of authority, could not be directly attributed to state institutions. Third, in comparison to the innovations of the opposition, some of the tools proposed by the authorities were disproportionally expensive. Fourth, unlike the cases of innovation by the opposition, the technological innovations introduced by the authorities did not lead to any real change in the state's own modus operandi. The organizational and doctrinal aspects remained unchanged.

Lastly, regarding shifts in the balance of power, on the one hand, we can see that the way opposition activists used ICTs was able to change the balance of power in many fields, including

election monitoring, the mobilization of protests, and agenda setting. On the other hand, the innovation created by the opposition cannot be considered as effectively disruptive. It has not led to a primordial advantage for the opposition or to a strategic shift in the balance of power. Eventually, the state was able to the restore the status quo that had been challenged by the innovations of the opposition. However, in most cases the state action to restore that balance relied not on innovation, but primarily on traditional doctrinal and organizational strategies including the use of administrative resources for top-down mobilization, on new forms of regulation based on new legislation, and on the mobilization of traditional forms of power like the police to prosecute political activists and restrict demonstrations. The role of innovation in the state's restoration of the status quo was in most cases minor. While the state was able to restore the balance of power, its capacity to respond to opposition challenges with innovation of its own was more than limited.

With the opposition demonstrating a considerable capacity to address political challenges through innovation, including diverse solutions which can be implemented in a short time, the state may face a situation where addressing innovation without innovation of its own will require more and more radical forms of traditional power. However, offline administrative resources and other traditional power resources may become exhausted and more radical and repressive actions may be required. Eventually, this will contribute to destabilization and lead to the creation of new and significant political challenges, which will be addressed by a new wave of innovation. This may lead to a further proliferation of protests and to increasing opposition empowerment.

Consequently, an analysis of the dynamics of innovation in the case of the Russian elections may suggest that in the long term ICTs can contribute to the erosion of authoritarian power and the strengthening of opposition activism. At the same time, the significance of innovation and the realization of its potential depend on the structure of the challenges that arise and on a variety of socioeconomic and political factors. A few months after the 2012 presidential elections, floods in southern Russia caused the death of more than 170 people. While the response of the authorities was heavily criticized as insufficient (Lipman 2012), the Russian people were able to use the Internet and to create a variety of tools that helped them to provide a self-organized emergency response (Khokhlova 2012b). The major role of volunteers in emergency relief was another example of a shift in the balance of power in a field traditionally dominated by state actors.

Any crisis situation can create new challenges and can trigger a shift in the balance of power. As a consequence, a crisis provides opportunities for ICT-based innovation and can be a driving force for development of the role of ICTs in social and political systems. Viewing crises as a

fruitful time for ICT innovation suggests that the development of the sociopolitical role of ICTs is cyclical in nature, developing from one crisis to the next. The role of ICTs in the balance of power in a particular political or social crisis cannot be determined with certainty. But what is certain is that crises will arise in the future. This study has suggested that focusing on the analysis of the process may give more answers than focusing on particular situational functions. When a society develops the capacity to address challenges through innovation, this could lead in the long term to significant political transformations.

References

Asmolov, G. 2011. Russia: elections and the "other side of the Panopticon". *Global Voice Online* [online, December 7]. Available at: http://globalvoicesonline.org/2011/12/07/russia-election-and-the-other-side-of-panopticon/ [accessed: September 9, 2012].

Asmolov, G. 2012. The balance of crowds: top-down and bottom-up mobilization strategies in the Russian election campaign. *POLIS blog* [online, March 3]. Available at: http://blogs.lse.ac.uk/polis/2012/03/03/the-balance-of-crowds-top-down-and-bottom-up-mobilization-strategies-in-russian-election-campaign-guest-blog/ [accessed: September 9, 20.12].

Castells, M. 2007. Communication, power and counter-power in the network society. *International Journal of Communication,* 1, 238-266.

Etling B., et al. 2010. *Public Discourse in the Russian Blogosphere: Mapping RuNet Politics and Mobilization*. [online: Berkman Center, October 18, 2010, last modified May 23, 2012]. Available at: http://cyber.law. harvard.edu/publications/2010/Public_Discourse_Russian_Blogo-sphere [accessed: September 9, 2012].

Garrett, R. K. (2006). Protest in an information society: A review of literature on social movements and new ICTs. *Information, Communication and Society* [online], 9(2), 202-224. Available at: http://journalsonline.tandf.co.uk/openurl.asp?genre=article&id=doi:10.1080/1369118060063077 3. [accessed: October 15, 2012].

Khokhlova, V. 2012a. Russia: the "Big White Circle" protest in Moscow. *Global Voices Online* [online, February 27] Available at: http://globalvoicesonline.org/2012/02/27/russia-the-big-white-circle-protest-in-moscow/ [accessed: September 9, 2012].

Khokhlova, V. 2012b. Russia: netizens respond online and offline to devastating Krymsk floods. *Global Voices Online* [online, 9 July]   Available at: http://globalvoicesonline.org/2012/07/09/russia-netizens-trying-to-explain-the-devastating-flooding-in-krymsk-helping-the-victims/ [accessed: September 9 2012].

Lipman, M. 2012. Floods and suspicion in Russia. *The New Yorker* [online, August]. Available at: http://www.newyorker.com/online/blogs/newsdesk/2012/07/floods-and-suspicion-in-russia.html [accessed: September 9, 2012].

McKitrick, J., et al. 1995. The revolution in military affairs, in *Battlefield of the Future: 21st Century Warfare Issues*, edited by B. Schneider and L.E. Grinter. Maxwell Air Force Base, Ala: Air University Press. Available at: http://www.airpower.maxwell.af.mil/airchronicles/battle/chp3.html [accessed: September 9, 2012].

Machleder, J. and Asmolov, G. 2011. Social change and the Russian network society, redefining development priorities in new information environments. *Internews Network* [online, August 2011, last modified May 23, 2012]. Available at: http://www.internews.org/research-publications/social-change-and-russian-network-society   [accessed: September 9, 2012].

Meier P. 2011a. *Do "Liberation Technologies" Change the Balance of Power Between Repressive States and Civil Society?* Fletcher School, Tufts University.

Meier, P. 2011b. *Crowdsourcing vs Putin: "Mapping Dots is a Disease on the Map of Russia"*. [online: December 4] Available at: http://irevolution.net/2011/12/04/crowdsourcing-vs-putin/ [accessed: September 9, 2012].

Russia, Freedom on the Net, 2011: A Global Assessment of Internet and Digital Media Freedom. [online: Freedom House]. Available at: http://www.freedomhouse.org/report/freedom-net/freedom-net-2011 [accessed: September 9 2012].

Sidorenko, A. 2011a. Russia: election day DDoS-alypse. *Global Voices Online* [online,

December 5]. Available at: http://globalvoicesonline.org/2011/12/05/russia-election-day-ddos-alypse/ [accessed: September 9, 2012].

Zuckerman, E. 2008. *Bridgeblogger and Xenophile, a Tale of Two Bloggers.* [online, December 5]. Available at: http://www.ethanzuckerman.com/blog/2008/12/05/bridgeblogger-and-xenophile-a-tale-of-two-bloggers/ [accessed: September 9, 2012].