[Gregory, Asmolov](#)
The Kremlin's cameras and virtual Potemkin villages: ICT and the construction of statehood

Book section
(Accepted version)

The Kremlin's Cameras and Virtual Potemkin Villages:
ICT and the Construction of Statehood

Gregory Asmolov (LSE)

Abstract

Analyzing the role of sensors, the chapter explores how information communication technologies (ICTs) are used by state actors to strengthen governance. While ICTs contribute to implementation and enforcement of political decisions, they also play a role in construction of symbolic statehood. Case studies demonstrate the role of web cameras in Russia: monitoring of national projects, post-emergency relief, elections monitoring, and city management. While web cameras increase accountability and provide means for the decisions' enforcement, deployment of networked sensors also provide means for deception through the symbolic construction of statehood. Web cameras are used for imitating statehood by communicating to the public the illusion of accountability and control. However, citizens' sensors challenge the symbolic construction that relies on governments' sensors. While ICT-based construction of statehood provides stability, in the long term increasing dissonance between the two systems of sensors can lead to a clash and the collapse of statehood.

The Collapse of the Soviet Union and Limited Statehood

Even after the collapse of the Soviet Union in 1991, the Russian state constituted the largest sovereign landmass in the world. It also inherited from the Soviet Union the

major elements of state power, including a nuclear weapons arsenal and a large standing army, and oil reserves that positioned it as one of the world's superpowers. However, having a huge territory, nuclear weapons, and rich energy resources does not necessarily guarantee a high degree of statehood. On the contrary, the size of the state makes preserving the degree of statehood more challenging. In the introduction to this volume, Livingston and Walter-Drop point out that some states, "are usually not considered weak, per se, despite their inability to provide basic collective goods." due to "their ability to marshal force." The limited statehood framework allows us to conceptualize an ambivalent political situation when a state is "simultaneously too strong and too weak" (see Chapter 1, p. 8).

Russian is an example of this type of political ambivalence. Beginning in the period of the Russian empire, power holders in Moscow and St. Petersburg struggled over how to control the country. The collapse of the Soviet Union, which can be understood as the result of increasingly limited statehood in the Soviet Republics, led to a new crisis of statehood for the Russian Federation. The new Russian state had to repair immediately an uncertain command and control system, a requirement made all the more urgent given the unstable political, social, and economic circumstances. Yet, more than twenty years since the collapse of the Soviet Union, the state's ability to implement political decisions and enforce them is still deficient, in particular in areas distant from Moscow, and during crises. One of the most significant—although not the only—indicators of statehood is endemic corruption; in Russia entire budgets disappear before reaching their destination. What is more, decisions made in the center do not reach outlying districts.

In response, one of the major initiatives of Vladimir Putin's rule has been the development of "power vertical," a centralized management system that enables full control of the entire country by the person at the top of the pyramid. It includes, for example, a reform of governors' election that allowed the Kremlin to control who is going to rule Russian regions. Questions of democracy aside, many experts question the efficiency of this approach. Russian sociologist Michael Dmitriev speaks of a deep institutional crisis, one in which traditional institutions are not able to fulfill their functions (Dmitriev and Belanovsky 2012). According to Shevtzova (2010), the system is in fact an imitation of a system; maintaining the façade of

fulfilling various governance functions has become a substitute for real action. One can argue that the imposition of vertical power eventually led to the opposite result. While the distributed semi-autonomous system of control was neutralized, it is questionable whether the vertical system has been able to substitute for it and strengthen statehood.

This paper argues that information and communication technologies (ICT) are used by the Kremlin as a part of the effort to build a "power vertical" in order to enhance its governance capacity. Yet the Russian case study also demonstrates the ambivalent nature of ICT's role for governance. ICT can just as well be used for contradictory purposes. It can serve to enhance transparency and accountability, on the one hand, or be used as a means of manipulating public opinion and to conceal the limited capacity of the state on the other hand.

The latter is not a new phenomenon. Russia has a long record in the construction of spectacles as a political strategy. Perhaps most famously, Russian Minister Grigory Potemkin is alleged to have created a series of painted façades to mimic real villages to impress Empress Catherine II during her visit to Crimea in 1787.[1] This chapter presents how ICT provides new methods for creation of virtual Potemkin villages. In this case, ICT is not used to improve the state's capacity to implement decisions and provide governance to its citizens, but rather to conceal the state's inaction in response to emerging problems.

However, monopoly of the state over construction of social reality as a substitute to governance is challenged by the same technologies that are used by the state in creating the manipulation. ICT (e.g., social media and crowdsourcing), as technologies of mass self-communication, enable emergence of a new citizens' surveillance power (Castells 2007). This power continuously deconstructs the "virtual Potemkin Villages." As consequence, what is appeared to be a strategy for manipulation is transform into a contest, one that demonstrates the duality of ICT and its role as a tool for empowering the state, and, at the same time, a source of countervailing power.

---

[1] Most historians agree that the Potemkin villages are probably a myth.

Statehood and the Power of Sensors

One of the major attributes of statehood is the capacity to monitor and evaluate conditions in the reach of its sovereign territorial boundaries. To know what decisions should be made, appropriate state institutions must know something about the social conditions that at least some regard as pressing problems. Second, they must be able to determine whether decisions were actually implemented in response to that awareness. Finally, the state must be able to say whether the results constitute at least an approximation of a solution.[2] These features can be conceptualized as *feedback* capacity. Feedback depends on the availability of *sensors* that collect data and *analytical resources* that are able to conduct data analysis.

A century ago, Max Weber underscored the political importance of feedback and sensors. Weber emphasized the central role of information flow and feedback for the bureaucratic process and defined bureaucracy as "body of arrangements for organizing information and communication into a system for rational decision making and administration" (Bimber 2003, 95). Livingston and Walter Drop explain: "Where information is hard to gather, manage, and distribute, one is more likely to find specialized command-and-control hierarchical institutions—bureaucracies—to manage it" (see Chapter 1, p. 10). This degree of statehood depends on the capacity to collect and process information by decision-makers. The more territory that must be monitored, the more challenging it is to collect and evaluate information about it.

A distributed model of monitoring evaluation suggests that the central government would transfer monitoring and evaluation responsibility to local authorities. However, that requires a certain degree of trust of the regional authorities by the central government. That is missing in Russia. As consequence, the data need to be collected directly by the center. Moreover, the regional authorities themselves are a subject for surveillance by the center.

Another system of sensors is the traditional media. However, if the government

---

[2] Murray Edelman has noted that politics involves the specification of some social conditions as problems worthy of consideration by the polity (Edelman 1988).

controls traditional media, their capacity to provide relevant and valuable information is debatable. Censored media tend to provide skewed, unreliable, and mostly positive feedback. As consequence, a system of sensors must be created to transfer information directly to the center. It requires both an elaborate network of sensors and a significant analytical capacity to evaluate the constant information flow.

The center-oriented autocratic model of information collection is reminiscent of Jeremy Bentham's Panopticon, used metaphorically by Michel Foucault, in which the center surveys the entire system (Foucault [1975] 1995, 195–228). But to what extent is the state capable of surveying the entire system from the top, especially when it is a big country with a high degree of corruption and weak institutional accountability? The purpose of this chapter is to consider whether ICT can strengthen a weak state's monitoring and enforcement capacity by compensating for deficiencies of the classical state bureaucracy, and consequently strengthen statehood.

ICT: Human and Nonhuman Sensors

Mechanism of monitoring and evaluation rely on two types of sensors: human and nonhuman. *Human* sensors are simply people who collect information about the surrounding environment. ICT allows for rapid and low-cost distribution of information collected by individuals to a wider audience (Castells 2007).

Nonhuman sensors are various types of technical devices that can collect information and send it to a central hub. At this point of technological development, the nonhuman sensors are separate devices that were created as dedicated sensors, such as web cameras. In the future, however, with the development of the "Internet of Things," we can assume that things themselves will contain many sensors that are connected to a worldwide network. According to an analysis by Cisco Systems, there will be 25 billion devices connected to the Internet by 2015 and 50 billion by 2020.

The sensors can be deployed on the basis of a central decision in order to collect specific information or cover specific areas. It means that in order to strengthen

statehood, a state can deploy or activate human *and* nonhuman sensors.

This chapter provides a number of case studies for deployment of a system of sensors in areas of limited statehood. These cases allow us to analyze the role of ICT-enabled sensors for statehood. The case studies demonstrate how the Russian authorities use ICT to collect and evaluate data relying on human sensors (bloggers, crowdsourcing) and nonhuman sensors (web cameras).

Human Sensors: Crowdsourcing and Social Media

Research of the Russian blogosphere conducted by the Berkman Center demonstrates the dissonance between traditional media and the space of mass self-communication (Etling et al. 2010). According to other research that was conducted by Medialogy, a data analytics firm, while traditional media tend to focus on "good news" that provides positive feedback to state policies, the Russian blogosphere content has primarily focused on problems and challenges to the state's governance capacity.[3]

If the degree of Internet freedom allows for the sharing of information online, in comparison to the major traditional media that are controlled by government, the Internet turns out to be the most significant resource for negative feedback.[4] This is in keeping with the conclusions reached by Castells: "Mass self-communication provides the technical platform for construction of the autonomy of the social actor, be it individual or collective, vis-à-vis the institutions of society. This is why governments are afraid of the Internet" (Castells 2012, 7). Consequently, as a "negative feedback resource" the Internet can have a crucial role in decision making. The human sensors that might have a political function can be defined as "*citizen sensors.*"

There are two types of citizen sensor systems that can be identified online. The first

---

[3] Based on F. Husnoyarov (2010) on about monitoring and analysis of media and blogosphere in real time [RUS], eGov 2.0 conference 2010.
[4] According to the "Freedom on the Net" report the Russian Internet is considered "partly free" (Kelly and Cook 2011).

type is the blogosphere and social media. People write blog posts, Facebook updates, tweets, and so on, about various events all over country, including information and opinion about actions by officials and various types of governance services. This type of sensor can focus on a particular institution or particular type of problem.

The flow of mass self-communication provides new opportunities for monitoring the situation all over the country and collecting feedback. Consequently, the government should be able to identify, collect, and analyze the relevant information. In this case the citizen sensors are already deployed and active. The only thing that the authorities need to do is to use the information that is already there.

Collection of feedback from the user-generated content platforms requires development of special media-monitoring software for data mining. In the Russian case, this software was developed by the firm Medialogy and included an iPad application that was able to compare information from social and traditional media about a particular topic and divide it into positive and negative information based on sentiment analysis (Samigullina and Badanin 2010).

A second type of citizen sensor relies on crowdsourcing. Unlike blog monitoring, the state created a dedicated system for the purpose of collecting information from citizens about various fields of policy. An example of crowdsourcing of negative feedback is the website "Rossiya bez durakov" (Russia without fools), which was created by the Russian presidential administration (http://россиябездураков.рф/). The website is actually a countrywide complaint book, where anyone can report problematic decisions or actions by state and regional officials.

The presidential blog and Twitter were also used as tools to collect feedback from citizens. Dmitry Medvedev has said that he reads at least fifty messages a day that have been sent to him through Facebook, Twitter, and other websites. He also said that he uses information from social media for giving direct orders: "Sometimes, when I am preparing to go to work in the morning, I go online and see something very problematic for our country. Then I print the document and write my orders

directly on it" (Medvedev 2012).

Even in relatively authoritarian countries, authorities can approach social media not only as a threat, but also as an opportunity to improve monitoring. Citizens who share information online can be seen as a human-based network of sensors. If the classical Panopticon model says that government follows citizens, the new model suggests that the central government could use the citizens as sensors to follow the local government.

Approaching the blogosphere as a network of sensors and a new opportunity for collecting feedback can increase the degree of statehood. At the same time, one can argue that if the president needs Twitter to know what is happening in the country, it demonstrates the failure of the traditional bureaucratic system and, as such, is a symptom of limited statehood. It can be also argued that public engagements with social media and response to complaints can be a part of a public relations strategy that emphasizes that the leaders care about the citizens and are personally involved in the solution of problems (an illustration of vertical power in action).

Nonhuman Sensors: Web Cameras

One of the more common types of nonhuman sensor is a CCTV camera. A web camera is any camera connected to the Internet that sends information online. Webcams have a number of unique features:

1. Deployment of sensors and t ransferring information is relatively inexpensive and easy.
2. Information collected by sensors can be transferred any distance in real time.
3. The information from sensors can be made available to a wide public in real time.

One of the first examples of using web cameras for participatory governance was launched in the United States in 2006. The state of Texas launched an initiative that allowed citizens to participate in watching the border of Mexico for illegal immigrants

through a network of surveillance cameras that were connected to the Internet. The watchers were able to follow the cameras through a special website (http://texasborderwatch.com) and e-mail the authorities if they saw any suspicious activities. The initiative was continued through BlueServo.net, a public-private partnership that created "Virtual Community Watch," where individuals could join virtual surveillance teams and alert the nearest sheriff if suspicious activity was identified (NBCNews 2010).

Borderlands are ambivalent areas where the statehood is defined and challenged at the same time. Borders are remote from the center, are close to areas beyond control of the state, and have high degree of security and criminal threats. ICT allows an increasing presence of the state in border areas. The BlueServoSM system includes two elements. The sensors are the webcams that survey the border areas and broadcast real time video online. The analysis of data that is collected by the sensors is crowdsourced through creation of the "Border Watch" community.

However, the role of nonhuman sensors in area of limited statehood can be much more complex than just increasing the capacity of the state to collect and analyze information. That is demonstrated in following case studies that focus on the role of webcams in Russia.

Case Studies

Web Cameras and Functional Governance

In 2005 the Kremlin announced the "national projects" initiative. This initiative designated that some of the projects considered by the central government to be of special importance would get funding from Moscow and would be placed under direct control of the government and the president. This would ensure that they would be implemented and the budget would not be abused.

Two years later, in April 2007, the Russian government released a special directive entitled "A concept for creation of the state's automatic system for informational support of management of the prioritized national projects." One of its stated goals

was the collection of audio and video information that would be used to confirm the realization of specific projects. It also designated a number of methods for collecting information and providing it to decision-makers. One of the tools described in the directive is the "mobile multimedia systems" that was to be installed in the office of the president and prime minister. The directive also said that some of the information could be shared with the public "on the official national projects website on the Internet in order to inform the public about how these national projects are realized" (Business Pravo 2009).

In 2007 web cameras were installed on the construction site of the Federal Center for Heart Medicine in Astrakhan. This would allow authorities in Moscow to monitor the pace of construction. Another ten web cameras were also installed in a number of construction sites in several remote regions. According to unconfirmed sources, some of the cameras were deployed without the knowledge of the local authorities.

A story shared by one of the Russian officials shows how the deployment of an Internet-based network of sensors could empower the "power vertical" and increase the degree of statehood. On one occasion, a governor came to meet with President Medvedev to tell him about recent developments in his region. Medvedev asked him about progress on the building of a new hospital that was being funded by federal money. The governor responded that the construction was moving forward fast and would be completed soon. Then Medvedev turned the screen of his computer towards the governor to display the web camera based live broadcast from the construction site. The site on the screen was empty.

It might be argued that the cameras are an indicator of limited statehood. A functioning state does not need cameras to verify that its bureaucracy is doing what it is supposed to do. However, the cameras can also be understood as an innovative part of a solution. The case demonstrates that deployment of networked sensors, and web cameras in particular, can strengthen a weak state's governance capacity and increase the state's ability to implement and enforce political decisions. At the same time, as the following case studies demonstrate, the functional role of the web cameras for increasing statehood can also be secondary and limited.

Webcams and Wildfires: ICT as a Means for Symbolic Statehood

While the Russian government has used cameras for monitoring since 2007, the first use to attracted broad public attention was in 2010. In late July 2010, Russia experienced unprecedented wildfires that killed more than sixty people and destroyed dozens of villages. A thick smog blanketed a number of cities, including Moscow.

In addition to the devastation that was caused by the fires, the natural disaster also led to citizens' increasing distrust of the government.[5] Citizens also personally verbally attacked Prime Minister Putin during his visit to one of the villages that was heavily damaged by the fire. During a meeting with victims of wildfires on August 3, Putin said this about the reconstruction process: "One of the most efficient methods of control is 24-hour surveillance. Therefore, I gave an order to place cameras on every significant construction site and three monitors: one in the White House (the Russian government compounds—G.A.), one at my home, and one more—on the government website." Putin emphasized that this would allow citizens to follow what happens at construction sites (Dni.ru 2010). Following Putin's order, a special dedicated page was launched on the prime minister's website, where anyone could follow one of thirty-five cameras located in twenty-eight villages.

The cameras were presented as a measure to increase transparency and accountability in post-emergency responses. However, the fact that the installation of cameras was presented as a symbol of accountability does not necessarily mean that the content that is provided by them led to that result. To what extent can thirty-five web cameras that broadcast twenty-four hours per day online really provide information about emergency relief and the progress of the work? One may question the significance of the scope of reality that is represented by a few dozen cameras.

---

[5] According to a public opinion poll by the Levada Center, most of the citizens of Russia haven't changed their opinion about the government following wildfires; however, most Russians believed that the authorities were not able to provide appropriate response when the disaster started wildfires [Levada Center 2010]).

Figure 1: Russian wildfires and web cameras cartoon.

Some citizens did not trust the cameras and suggested that the initiative's purpose was the creation of an impression of accountability. A cartoon that was distributed online following Putin's initiative showed a webcam installed opposite a painting of a beautiful green and sunny village house. Both the camera and the picture are surrounded by wildfires, and a human skeleton sits under the column supporting the webcam.[6] Other citizens argued that the cameras were a distraction that were used to cover up inappropriate usage of the reconstruction budget. "The cameras should be placed in the office of officials where they share money," wrote an anonymous Internet user.

While ICT can provide a decision enforcement mechanism and increase the degree of statehood, at the same it can be used for the symbolic construction of transparency and accountability that substitute for real measures of transparency and accountability. The thirty-five webcams that broadcast live images represent a narrow and selected part of reality. Eventually, ICT enabled a new method to create virtual Potemkin villages. ICT is able not only to contribute to transparency, but also

---

[6] The cartoon, originally posted at www.yaplakal.com, can be found here: http://irevolution.net/2011/04/03/icts-limited-statehood/(Meier 2011b).

to create an illusion of transparency. One can argue, that in this case, the medium (web cameras) is the message (transparency and accountability).

The web cameras have an additional role for statehood. Prime Minister Putin emphasized that he would follow the information from the cameras personally via special monitors. The webcam system was used to send a message that the president is keeping the situation under his personal control. A capacity to enforce decisions is substituted by the construction of a symbolic statehood through the image of control. The symbolic function of web cameras as an image of statehood is reminiscent of the function of the Panopticon for power, as described by Foucault. What is really important in the Panopticon is not the actual capacity to see everything, but the design of the system in such a way that it sends a message that everything is under control. To some extent, the Panopticon is more powerful as a symbol of surveillance than the methodology of surveillance. However, if in the classical case the Panopticon is used for suppression of individuals, in the case of limited statehood it is transformed into a strategy for deception that seeks to convince the citizens that the state is still able to govern. Deployment of sensors is a symbolic act of statehood that substitutes policy-making and decision enforcement for show. Any project for deployment of networked sensors can serve both functional and symbolic purposes, but the balance between these two can be different in various political systems.

Sensors and Legitimacy: The Case of the Russian Presidential Elections of 2012

The next big state-backed project that used web cameras was the monitoring of presidential elections. This time it was not only a question of control over the bureaucratic system or accountability, but also the existential issue of legitimacy of the political leadership. Following the questionable results of elections to the Russian parliament, the Duma, in December 2011, the presidential elections took place in a sensitive political situation. Thousands of Russian citizens protested against election fraud and demanded fair presidential elections.

ICT played a s ignificant role in exposing the degree of fraud. A special crowdsourcing platform, "Map of Violations" (http://kartanarusheniy.org), collected

reports for citizens about a variety of election frauds. Mobile phones and cameras were actively used to create visual proof of falsifications, which were immediately shared online. Many activists who had witnessed fraud, either while voting or while working as observers, posted their testimonies online. The significant increase in the number of human and nonhuman sensors following the elections created a critical mass of evidence that brought into question not only the legitimacy of the parliamentary elections, but also the upcoming presidential election (Asmolov 2011a). Crowdsourcing platform, as one of the forms of mass self-communication, allowed challenging the balance of power and questioning the capacity of the state to control information about elections fraud.

The Panopticon as a conceptual model helps us to understand the nature of this change. In Jeremy Bentham's original prison design, prisoners inhabit an outer ring of cells, all cut off from one another. At the center of the ring is an observation space occupied by the guards. The guards can see each of the prisoners without themselves being seen. Thus, the prisoners never know whether they are being watched. ICT attenuates the centralized observational power of centered authority by offer an opportunity to those on the periphery to communicate and share information among themselves. Networked surveillance has reversed the power relationship such that the center is now observable by a citizen-based network of sensors.

Fredrik Sjoberg argues that because ICT has increased the cost of election manipulation, authoritarian states must now find new election strategies (Sjoberg 2012). The government has to protect the legitimacy of the elections and respond to the emergence of the counter-power of citizen-based sensors. It can restore the balance either by restricting the citizen-based system of sensors or by harnessing the citizen's sensors to the state-backed system. Both options unfolded in Russia.

A few days after the parliamentary elections, Vladimir Putin (this time the Russian presidential candidate) offered to put webcams on all polling stations in Russia. He explained that the country should see what happens at every polling box, as a way to eliminate fraud as well as to minimize the capacity to argue after the elections that the voting process was unfair.

It was not the first time that web cameras were used for election monitoring. The pioneer in this regard was Azerbaijan, which introduced a webcamera real-time monitoring system in their 2008 elections. The cameras there were deployed in 10 percent of polling stations (Sjoberg 2012). However, the scale of Russia's project was unprecedented. In less than three months, Russian authorities wanted to construct what could probably be considered the largest network of visual sensors in human history to cover the territory of the biggest country of the world.

Russia had approximately 95, 000 polling stations. The number of polling stations that were covered was 91, 000, with more than 180, 000 cameras (every station had two cameras). Of these, 80, 000 cameras broadcasted live-stream online. The rest recorded videos that were supposed to be available on request following the elections. One camera in a station was focused on the polling box, and another camera showed a general view, including the registration table. After the voting was completed, the cameras broadcasted the votes being counted.

The project, with a budget of about 13 billion rubles (around half a billion dollars), was given to the state's telecommunication company, Rostelecom. The most expensive part of the project was development of infrastructure to allow connecting all the stations. It also included creation of nine centers for data collection, where the video archives were stored after the elections.

On the day of elections Internet users could access a special website http://Webvybory2012.ru. It had a big map of Russia covered with dots of polling stations. One could zoom in to a particular region or find a particular polling station through a search engine. Once a user had chosen a particular polling station, he could switch between the two cameras and follow the events there not only visually but also with sound.

In addition to the website, two big video walls were constructed to demonstrate the video on the day of elections. One video wall with twenty LCD monitors was installed in the main office of the Central Election Committee. Another wall with thirty-six monitors was placed in the "Elections 2012" information center. The head of the

Russian election committee, Vladimir Churov, praised the technology: "For the first time in history we can see in real time the opening of the polls in Chukotka, which is eight time zones away from us. For the first time in history we can see everything in the polling station" (RIA Novosti 2012a).

According to the Under Development company that was responsible for the http://Webvybory2012.ru website, 3.5 million Internet users visited the website and watched about 7.9 million video streams. Among them, 914, 000 were from Moscow and the Moscow region, 308, 000 from Saint Petersburg and its region, and 112, 000 from the Krasnodar region. Four million hours of video were recorded (1, 350 TB). The most viewed regions included Moscow (3 million streams), the first region that started to vote —Chukotka region (2.1 million), and Chechnya (1.3 million streams). The most popular polling station for video streaming was a private house in Mesedoy village in Chechnya (RIA Novosti 2012b).

On March 5, the day following elections, Putin summarized the role of the project as follows: "I think that - not 100 percent, but to a certain extent - they (web cameras— G.A.) played a role and increased the transparency of the process." Putin noted that no other country in the world has created this type of system, and promised to continue "improvement of the electoral procedures, increasing transparency and minimizing, reducing to zero violations" (RIA Novosti 2012c).

Experts and citizen activists, however, questioned this evaluation of the role of the system and argued that the cameras were not able to identify a number of potential and significant types of manipulation, that is, illegal changes in the protocols of voting or multiple voting by the same people.

In his analysis of web cameras in the Azerbaijan elections, Sjoberg (2012) argues that "authorities adjust their fraud strategies in the presence of a particular monitoring technique." He suggests that the ruling power is able to introduce compensation mechanisms that "are able to prevent vote share losses, while contributing a veneer of legitimacy by self-initiating anti-fraud measures."

The case of Russia is different from the case of Azerbaijan, first because—

according to Sjoberg—the major compensation mechanism was selective allocation of web cameras in "less fraudulent precincts." However, in Russia cameras covered the majority of polling stations, and therefore allocation bias was not possible. Second, in Russia, in comparison to Azerbaijan, the degree of Internet penetration as well as Internet activism is higher.

In the Russian case, however, we can see more complicated compensation mechanisms. Even if people could see illegal activity occurring on their screen, there was little they could do about it. The system had not provided any mechanism for submission of complaints if something wrong were to occur. It also had no mechanism for recording the broadcasts. The recordings from cameras were stored in data centers and the public could submit an official request to get a limited amount of video footage. However, the process was complicated and time consuming.

Furthermore, the legal status of video recording in the courts was not defined. When an oppositional politician from Astrakhan, Oleg Shein, collected evidence of falsification from webcams in his city, the head of the central election committee responded that there were "procedural problems" and the court refused to cancel the results of voting. Ultimately, none of the 4 million hours of video footage led to a criminal conviction of election fraud or revision of election results in any of the polling stations. Deputy director of the independent monitoring organization Golos, Grigory Melkonyantz, says that in some cases judges refused to request webcam footage or accept it as legitimate evidence in fraud investigations.[7]

The large number of cameras that were available for surveillance via the Webvybory website made it difficult to focus on a particular place. An offline observer has usually one polling station to monitor for the entire day. But when people have access to 80, 000 stations, it is more difficult to achieve meaningful results. Information overload reduces the efficiency of surveillance. Unlike the classical Panopticon, in this Panopticon the citizens had access to the governmental network of sensors. However, the system's architecture led to sporadic gazing instead of meaningful

[7] Based on interview that was conducted by the author (September 3, 2012).

systematic observation that could lead to viable outcomes.

Online activists addressed some of these challenges. Tech-savvy Internet users developed a few methods for recording the webcasting from polling stations. Following the elections, some groups tried to conduct analysis of data that was collected. However, doing so proved to be time consuming. Still, despite this handicap, the analysis revealed many examples of elections fraud. For example, one video captured images of the same handful of persons voting many times in Chechnya. Even members of a local elections committee could be observed doing so.[8] Despite these limitations, according to Grigory Melkonyantz, the Webvybory system engaged the public in monitoring, limited the scope of potential manipulations, and provided proof that the state was not willing to investigate strong evidence of fraud.

At the same time, the webcam-based surveillance turned out to offer major entertainment value as the biggest reality show in Russian history. The most popular polling station was a private home in Chechnya, where Internet users could follow a family, including the children, sitting around the table. Obviously no significant fraud could take place there, since this station had only a few registered voters. The Russian blogosphere was full of comic images that were taken on webcams such as observers falling asleep, a kissing couple, and an automatic rifle left on the committee table in a polling station in the Caucasus.

In many cases the motivation for surveillance had nothing to do with politics. People used the system to see how their old school looked, or watched their relatives and friends in other cities vote. Russian communication minister Igor Schegolev said the Webvybory "is a social video network that allows the country to see itself" and watch how Russian citizens live in other regions (RIA Novosti 2012d). A popular blogger Varlamov wrote in his Twitter feed: "Thanks to web-cameras people from Moscow discovered today the existence of the rest of the country."

---

[8] "Falsifikatziya vyborov presidenta RF v Chechne. Yavka 99%,"
http://www.youtube.com/watch?v=jxf-nRTDvGQ.

In the summer of 2010, at the Tver Forum, President Medvedev said that the Internet contributes to rebuilding the territorial integrity of the country and argued that e-government allows for creating an undivided space within the borders of Russia. In some ways, the Webvybory project did contribute to statehood, by allowing a symbolic self-reflexivity of the state for its citizens. Thanks to the mediation of ICT, a fragmented physical territory was transformed into a more united space.

To conclude, the case of the Webvybory project goes beyond the imitation of transparency and illusion of accountability. The architecture of the system promised that the only result of it could be increased legitimacy. A system that in theory would be able to collect feedback and translate it into decision-making instead resulted in the construction of a façade of a system able get feedback and respond to it. The webcam project was not really created by the government to get more information about the election process. Rather it was an overly large sensor system constructed in a way that feedback could not be collected nor make an impact on the electoral process, while it functions to maintain and protect the status quo.

The Webvybory project has not led to a reconsideration of the election results. According to official results, Putin received 63.6% of votes, while some independent groups argued that the real degree of support just over 50% (Nichol 2012, 6).[9] At the same time, it should not be a surprise that while people went out into the streets to protest the election results, the official response was that the web cameras had made the elections fair and the most transparent in the world. Eventually, the Webvybory system was used not only to legitimize the results of elections, but also to delegitimize protests against the election results.

Moscow Snowfalls 2013 and "Photoshop Governance"

Another example of video surveillance as a digital Potemkin Village is found in an initiative in Moscow. In 2011, Moscow City Government launched the crowdsourcing platform "Our city: A portal for city governance" (http://gorod.mos.ru) in order to give

---

[9] For a statistical analysis of Russian elections results, please see Klimek, Yegorov, Hanel, and Thurner (2012).

citizens the ability to submit complaints about problems in city, as well as to express gratitude if something good has been done. According to the rules of the website, any complaint approved by moderator has to be responded within eight days by a relevant authority. In short order, the website received dozens thousands of complaints. Many of them apparently lead to solution of a problem brought to the attention of the city government. It would seem to be a positive innovation to city governance. Yet, some users questioned the efficiency of the website. Local media argued that the most active complainers were blocked by moderators and the website was accused of embellishing reality. Some users also argued that the platform had a suspicious number of "thank-you" messages posted to local authorities.

In winter of 2012–2013, due to the heavy snowfall, the city was almost paralyzed, and clearing the snow became major issue on the media agenda. One of the people who complained about situation through the website was a blogger and activist named Yuriy Ursu. Ursu submitted a message that said that the snow in front of his building hadn't been cleared for a long time. To prove the point he attached a photo of his snowbound building. A couple of days later day, the local authority of Orekhovo-Zuevo that was responsible for this neighborhood responded that the problem had been solved, the snow was cleared from his building, and that the local contractor responsible for the service was issued a fine. A photo with a cleaned path to the building was attached to this message.

When Ursu checked the attached photo he saw that it had been edited with Photoshop. He immediately went to take a new photo of the same location, clearly showing that the snow had been cleaned only in virtual reality. In the real world, the snow remained. When Ursu submitted a new complaint to the portal, it was blocked by a moderator. Ursu also wrote official letters to the mayor and local prosecutor office and posted the story and many updates on his personal blog. The blog post included detailed analysis of the image that proved that Photoshop was used in order to remove the snow (Ursu 2013).

Russian liberal media celebrated Moscow city government's "new strategy" for snow. It suggested that "Photoshop governance" should be used in order to solve a

variety of problems, including traffic and lack of parking places. A few days later, Leonid Bogatyrev, the head of the Orekhovo-Zuevo district where the incident took place, resigned. According to official version, his resignation was voluntary. Moreover, another false response on crowdsourcing platform was identified through an internal investigation of Moscow government. A mayor of Moscow, Sergey Sobyanin, declared that there was a revolution in city management since every person who lives in the city is an inspector (or one would say a sensor) (Protzenko 2013).

In addition to human sensors, the Moscow government declared that the snow is monitored through a large network of nonhuman sensors. According to Artem Ermolaev, the head of IT department of the city government, the authorities use 87, 000 cameras deployed all over the city and 53 human monitors to keep track of city business. The city conducts inspections that can lead to punishments where a local contractor fails to clear the snow in specific area.

Moreover, as a result of the "Photoshop scandal," the city government announced the formation of a special "feedback unit" that is to take photos of the places that were a subject to complaint. Once the problem has been remedied, a photo of the resolved issue will be posted online. According to Russian newspaper *Izvestia*, the officials want in this way to protect themselves from further "Photoshop scandals" (Basharova 2013).

"Clearing" the snow with Photoshop is a good example of digital Potemkin villages. Photoshop, in this case, is another substitution for action, a mere imitation of governance that conceals the degree of limited statehood. However, no less important is the fact that this practice was exposed and transformed into a scandal that forced the government to respond.

The way the scandal emerged demonstrates the power of the crowd to expose a fraud and attract attention not only to the problem, but also to the manipulation. The Internet user successfully employed a variety of means, including crowdsourcing platform, his personal blog, and official channels, in order to put the issue on the agenda.

While the efficiency of the Moscow government is still questionable, we can see that ICT leads to a change in the rules of the games around the accountability of authorities. Even if the technology was created to only imitate openness, transparency, and effective governance, it still eventually forced local authorities to adapt to a new information environment, one where the power of crowds wouldn't allow them to conduct simple manipulations. It also forces the officials to change the monitoring and control practices, as well as the organizational structure, in order to be able to deal with emerging surveillance power of the citizens.

At the same time, one can argue, the impact is limited since the government frames the problems in such a way, that only mid-level officials (e.g., heads of districts) and contractors held accountable, while the top leadership remains beyond the reach of accountability. From this perspective, ICT not only increases transparency and accountability but also frames accountability in a way that serves the interests of those who launched the system.

Analysis: Sensor Polarization and the Statehood Bubble

While statehood depends on the capacity of the state to collect and process information, ICT enables new strategies and methods to fulfill these tasks and, consequently, to increase the degree of statehood. It includes various technologies that allow deploying sensors or collecting information from existent human sensors, as well as applications for analyzing collected data and incorporating it into decision making. However, what the case studies above demonstrate is that the new opportunities can be used in different ways and for different purposes. ICT can provide a toolbox for the imitation of transparency and accountability. It suggests a new means for the symbolic construction of statehood.

While ICT can increase statehood, in some political environments it leads to the opposite effect. For some political leaders, the symbolic power of ICT is more tempting than its functional capacities. Manipulation with ICT substitutes for action. A symbolic construction of statehood that relies on deployment of sensors and surveillance becomes a strategy to mask the state's inability to deliver basic public

goods. The Russian webcam system was not created for monitoring reality, but for constructing reality.

In case these symbolic constructions are challenged by the counter-power of the citizens' mass self-communication, state-backed ICT systems can make an effort to restore the balance of power by limiting or harnessing the power of citizens, as well as distracting them from the problems. Citizen-based systems of sensors tend to provide more negative feedback that challenges the existent status quo and requires action to address social and political problems. State-sponsored systems of sensors are constructed in a way that provides positive feedback, with some with controlled negative feedback that focuses on specific institutional segments (e.g., regional bureaucracy) without challenging the top of the ruling power vertical. Consequently, the purpose of this system is to preserve the status quo (legitimize inaction) and avoid signals that require significant action.

Both systems are interrelated. While state-sponsored systems of sensors provide positive feedback with a controlled degree of negative information, citizen-based systems of sensors continue to collect and share a constant flow of negative feedback. However, traditional institutions ignore this feedback, since it challenges their political interests.

One the one hand, in the short term the deployment of sensors focused on the construction of symbolic statehood through the imitation of control and accountability can provide relative political stability. Surveillance systems designed to preserve the political status quo can temporarily improve state legitimacy. On the other hand, the constant flow of positive feedback creates an existential threat to any system. The state and its decisions become increasingly disconnected from reality.

Polarization of the two systems of sensors can lead to a point where dissonance can undermine the state's legitimacy and foment immediate socio-political unrest. The bubble of a symbolic statehood that relies on ICT-mediated construction can explode. It can lead not only to a wave of protests, but also the emergence of new modes of governance that provide an alternative to the inaction of the authorities.

Russian authorities have a rich and diverse e-government program. There is no doubt that development of e-government can contribute to the strengthening of statehood, as well as improve governmental services provided to citizens, increase transparency and accountability, and allow new forms of citizens' participation. However, these opportunities also provide new tools of manipulation. The case studies presented here have demonstrated that the manipulation is likely. However, ICT as a tool for the imitation of statehood and construction of legitimacy is not sustainable. Dysfunctional bureaucratic structures cannot be compensated for by the deployment of sensors, nor can decision making be replaced by observation. Such measures can postpone the crisis, but can also make the collapse more significant and inevitable.

In the fairytale "The Emperor's New Clothes," Hans Christian Andersen tells about two weavers who leave the Emperor naked after they promise him unique suite that won't be visible for stupid and incompetent people. The officials, the public, and the king himself afraid to confess that they can't see anything until the moment a child cries out, "But he isn't wearing anything at all!" ICT can provide invisible threads that enable weaving a new attire of statehood, but this only works until the Internet crowd exposes that the state is naked.

References:

Asmolov, G. 2011. "Russia: Election and the 'Other Side of the Panopticon.'" *Global Voice Online,* 7 December. http://globalvoicesonline.org/2011/12/07/russia-election-and-the-other-side-of-panopticon/.

Bimber, B. 2003. *Information and American Democracy: Technology in the Evolution of Political Power*. Cambridge: Cambridge University Press.

Castells, Manuel. 2007. "Communication, Power and Counter-power in the Network Society." *International Journal of Communication* 1: 238-266.

Dmitriev M. & S. Belanovsky, Vlast Prohodit period poluraspada,

Vedomosti.ru 04.07.2012.
http://www.vedomosti.ru/opinion/news/2245274/vlast_prohodit_period_poluraspada

Foucault, M. 1975 (1995). *Discipline and Punish: The Birth of the Prison*. Translated by A. Sheridan. New York: Vintage Books.

Etling, Bruce, Karina Alexanyan, John Kelly, Rob Faris, John Palfrey and Urs Gasser. 2010. "Public Discourse in the Russian Blogosphere: Mapping RuNet Politics and Mobilization." *Berkman Center*,October 18. Last modified May 23, 2012. http://cyber.law.harvard.edu/publications/2010/Public_Discourse_Russian_Blogosphere.

Freedom House, "Freedom on the Net 2011: A Global Assessment of Internet and Digital Media Freedom," http://www.freedomhouse.org/report/freedom-net/freedom-net-2011, (accessed October 10, 2012).

Interview with D. Medvedev (Russian transcript). 30.07.12, http://government.ru/docs/19842/

Kontzeptrizya sozdaniya gosudarstvennoy avtomatizirovannoy systemy informatzionogo obespecheniya upravleniya prioretetnymi natzionalnimi proektami, Pravitelstvo Rossiyskoy Federatzii, , (24.04.2007), http://elementy.ru/Library9/Progr516r.htm

Meier, P. 2011. "Information and Communication Technology in Areas of Limited Statehood: A New Form of Governance?" March 4. http://irevolution.net/2011/04/03/icts-limited-statehood/.

Minkomsvyazi soobshil ob okonchanie web-translyatzii s izberkomov,,5.03.12, http://ria.ru/vybor2012_webcam/20120305/584867031.html

OpenNet Initiative. 2010. "Russia." December 19. Last accessed October 10, 2012. http://opennet.net/research/profiles/russia.

"O vnesenii izmeneniya v federalnuyu tzelevuyu programmu "Elektronnaya Rossiya" (2002 - 2010)".
http://www.businesspravo.ru/Docum/DocumShow.asp?DocumID=156876&DocumType=31

Putin schitaet effektivnoy rabotu web-kamer na vyborah,c 5.03.12,
http://ria.ru/vybor2012_webcam/20120305/585042480.html

Samigullina A., Badanin R, Strana na Ladoni, 28.10.10, Gazeta.ru,
http://www.gazeta.ru/politics/2010/10/28_a_3432218.shtml

Shevtzova, L., Degradatziya, Novaya Gazeta, 01/12/2010,
http://www.novayagazeta.ru/data/2010/135/15.html

Sjoberg, Fredrik M., Autocratic Adaptation: The Strategic Use of Transparency and the Persistence of Election Fraud (June 29, 2012). Available at SSRN:
http://ssrn.com/abstract=2133565

Systema web-translyatziy vyborov stala "socialnoy videosetyu" - Schegolev, 04.03.12, http://ria.ru/vybor2012_webcam/20120304/584389286.html

"Texas Using Web Cameras on Mexican Border." NBC News, October 15, 2010. http://www.msnbc.msn.com/id/15546009/ns/us_news-life/t/texas-using-web-cameras-mexican-border/.

Videostena dlya nablyudeniya za hodom golosovanya otkrilas v TZIKe, , 04.03. 12, http://ria.ru/vybor2012_hod_vyborov/20120304/584256086.html

Zhile pogoreltzam postroyat v pryamom efire, Dni.ru, 03.08.2010, http://www.dni.ru/society/2010/8/3/196526.html