Knowledge and Imperial Governance: Fighting Cattle Plague in the Eighteenth and Nineteenth Centuries Russian Empire

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Abstract

This thesis investigates continuities and changes in ideas, representations and policies related to cattle plague and livestock breeding throughout the eighteenth and nineteenth centuries in the Russian empire. It traces the evolution of the understanding of the nature of cattle plague as reflected in legislation, official documents and works by veterinarians and cattle owners. Additionally, it also teases out the ways in which different authors and actors created broader images of different social groups and the authority when writing about epizootics. In parallel, the thesis points attention to the ways in which these various ideas were the constituent elements of the state authorities of different levels, institutionalized veterinary medicine or regional identities.

The analysis of the role of cattle plague in such variegated perspectives serves the purpose of illuminating the logic of the function of state authorities in regard to the creation of and interaction with different images and representations. This thesis points to unsystematic ways in which the Russian empire used and not used symbolic narratives in its governance. Simultaneously, on the basis of two cases, namely the project of inoculation against cattle plague and the representation of peasants, it identifies a pattern according to which the state sought to avoid relying on such narratives in order to prevent subjects` attempts at using and renegotiating them.

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Introduction

There are two strongly interlinked main threads of analysis in this work. The first one concerns the study of the development of ideas, representations, practices and measures related to epizootics in general and to cattle plague more specifically in the eighteenth and nineteenth century Russian empire. I focus on the explanations of the nature of animal diseases in the texts of both veterinarians and non-specialists and also from legislation, trace the evolution of the state governance regarding this issue, look at broader discussions and rhetoric about cattle plague and livestock breeding and, finally, point to continuities and changes in knowledge and policies regarding epizootics.

The history of epizootics and veterinary medicine reveals important findings themselves and, thus, are worthy of attention. However, for this thesis, epizootics and veterinary medicine are important because they provide a case study for the second theme that I explore in the thesis, which is the role of knowledge and various sorts of representations in the state rule in the Russian empire and the state`s interactions with different groups in society. My argument is that the state tried to avoid relying on representations and rhetoric as much as possible, which contributes to the understanding of the rule in the Russian empire in general.

Cattle plague, or rinderpest, is disease that affects cloven hoofed animals, among which cattle were its major victims throughout the history. It does not affect humans. It is generally described as highly infectious and highly lethal, with death rates up to 90% or even more.[1] Spinage describes the course of the disease as follows: "Loss of appetite accompanied by fever is followed by salivation and discharges from the eyes and nose. This is succeeded by buccal

[1] William P. Taylor, *Rinderpest and Peste Des Petits Ruminants: Virus Plagues of Large and Small Ruminants* (London, UK: Academic Press, 2005), 69.

ulceration, diarrhea, dehydration, and death in 6-12 days after the onset of the fever".[2] Clinical signs may vary greatly. The physical conditions of a host influence its susceptibility to cattle plague. For a better understanding of the effects of measures against rinderpest which, in this case, were employed in the Russian empire, it is quite important to take into account that "The virus [of rinderpest] is not robust, surviving outside the host only at low or high relative humidities and readily destroyed when the humidity is between 50 and 60%. It is sensitive to heat, light, and ultrasonic waves, as well as very acid or alkaline conditions, and rapidly destroyed when dried by evaporation".[3] The main way the virus is transmitted is through direct contact between animals; it can also be passed on through intermediaries, such as meat, bodies, skin, excrements of infected beasts, fodder etc. The transmission through water is unlikely. No way to treat cattle plague has been discovered.

In 2011, cattle plague was announced by United Nations Food and Agriculture Organization to be the second disease, after smallpox, that was fully eradicated throughout the globe. Such success, however, was an end of cattle plague`s truly formidable history. Throughout centuries and continents, it claimed hundreds of millions of lives of cattle and some other animals. It caused an enormous damage to livestock, often taking away people`s essential means of existence, disrupting economic enterprise and trade.

While human epidemics receive considerable attention in historiography, animal diseases started to attract historians` attention only recently.[4] The few works on this topic that

[2] Clive A. Spinage, *Cattle Plague: A History* (New York: Springer Science & Business Media, 2003).5.
[3] Ibid., 13-14.
[4] On the history of medicine in the Russian empire see: John T. Alexander, *Bubonic Plague in Early Modern Russia: Public Health & Urban Disaster*, Johns Hopkins University Studies in Historical and Political Science ; Ser. 98, No. 1 (Baltimore: Johns Hopkins University Press, 1980); Roderick E. McGrew, *Russia and the Cholera, 1823-1832* (Madison and Milwaukee: University of Wisconsin Press, 1965); Elisa Marielle Becker, *Medicine, Law, and the State in Imperial Russia* (Budapest: Central European University Press, 2011); Charlotte E. Henze, *Disease, Health Care and Government in Late Imperial Russia: Life and Death on the Volga, 1823-1914* (Abingdon, Oxon; New York, NY: Routledge, 2011); Nancy Mandelker Frieden, *Russian Physicians in an Era of Reform and Revolution, 1856-1905* (Princeton, N.J.: Princeton University Press, 1981).

exist are rather an exception than the rule.[5] An important pioneering project is a recent collection of case studies entitled *Healing the herds*, which suggests several directions for the study of the history of cattle diseases.[6] The collection emphasizes the rise of the internationalization of the problem of animal disease in the nineteenth century due to the increase of cattle trade and urbanization. It also points to connections between veterinary control and the expansion of state bureaucracy and the administration of indigenous population in oversees colonies. In the field of social practices, it raises the issues of the extent to which rural population and farmers were reluctant to accept imposed veterinary methods of treatment and the professionalization of veterinary medicine. This thesis goes along some of these lines as well.

Concerning the theoretical standpoint behind this study, I join those scholars who identify the importance of diseases and epidemics not only as having destructive influence on societies, but also as provoking various responses which illustrate some broader traits of societies and states within certain context. It is telling, for example, that diseases often provoke both strikingly similar as well different responses within different historical coordinates.[7]

Despite the extensive engagement of researchers with many socio-economic issues regarding the nineteenth-century Russian empire, the fact of mass-scale efforts to combat cattle plague and the eventual eradication of it at the end of the nineteenth century in the Russian empire is conspicuously absent in historical works, even as a reference.

[5] Pule Phoofolo, "Epidemics and Revolutions: The Rinderpest Epizootic in Late Nineteenth-Century Southern Africa," *Past and Present* no. 138 (February 1993): 112-43; Terrie M. Romano, "The Cattle Plague of 1865 and the Reception of 'The Germ Theory' in Mid-Victorian Britain," *Journal of the History of Medicine and Allied Sciences* 52, no. 1 (1997): 51–80; Marie Robinson, "Plague and Humiliation: The Ecclesiastical Response to Cattle Plague in Mid-Victorian Britain1," *Journal of Scottish Historical Studies* 29, no. 1 (July 2009): 52.; Stephen Matthews, "Cattle Clubs, Insurance and Plague in the Mid-Nineteenth Century," *The Agricultural History Review* 53, no. 2 (2005): 192–211.

[6] Karen Brown and Daniel Gilfoyle, *Healing the Herds: Disease, Livestock Economies, and the Globalization of Veterinary Medicine* (Ohio University Press, 2010).

[7] *Epidemics and Ideas: Essays on the Historical Perception of Pestilence*, ed. Terence Ranger and Paul Slack, (Cambridge University Press, 1992), 1-20.

In the light of this, let me briefly outline some key moments characterizing epizootics of cattle plague in the context of the Russian empire. There are no statistics on epizootics in the eighteenth century, although there some hints that cattle plague claimed at least tens of thousands of cattle during some years. The gradual increase of epizootics of cattle plague was directly proportional to the growth of the internal livestock trade. Throughout most of the nineteenth century cattle plague claimed hundreds of thousands of cattle, though more or less reliable statistics only started to be collected only in 1880s.

Animal diseases, together with more well-known famines and human diseases, constituted another traumatic experience that peasants often encountered during their lives. Farm animals, among which cattle provided the biggest amount of resources, constituted an indispensable part of the peasants` agricultural activities. The death of cattle threatened the household economy greatly and sometimes it was hard to recover from such losses. There were many instances when entire villages witnessed the death of almost all its livestock. Apart from peasants, landlords and cattle traders suffered from the impact of epizootics as well.

While it is clear that economic losses were high, the state did not really think so for a long time. It is common knowledge in the historiography of the Russian empire that local authorities had little means to enforce certain policies upon rural areas. It is not surprising, then, that the state administration was unable to influence significantly the spread of epizootics up until the last quarter of the nineteenth century. While it is true that some European countries enforced measures against cattle plague more consistently and successfully than the Russian empire, important reservations regarding such comparison should be made. Unlike in European countries, the outbreaks of cattle plague in the Russian empire emerged constantly year after year, rather than intermittently after long periods of relief. This was because cattle owners were moving droves along numerous livestock routes, from the southern regions to Saint Petersburg and Moscow primarily, cutting across huge territories and a lot of different regions of the

empire. Such constant movement of herds of cattle was, in fact, an inseparable part of the landscape of many provinces of the Russian empire. Most importantly, cattle plague was endemic in those areas were livestock intended to be transferred to the capital cities was concentrated. This meant that cattle from the steppe were resistant to cattle plague to some degree, but they could have transmitted the disease and thus infected animals from other territories. This often happened in areas adjacent to livestock routes.

As cattle plague became widely recognized as the deadliest and the most harmful among animal diseases many explanations of the causes and methods of the eradication of cattle plague were suggested and many measures of varying intensity and under different circumstances were enforced throughout Europe in the eighteenth and nineteenth centuries. Although the virus that causes rinderpest was discovered in 1902, for at least two previous centuries prior to the discovery of the virus, it was correctly held, though far from universally for sure, that cattle plague was highly contagious and that, therefore, the channels of its spread should be disrupted. Ideas about the measures against the disease and epidemiology of cattle plague were often not entirely off base during the nineteenth century in the Russian empire as well. It is not my purpose, however, to idealize the nineteenth century knowledge about cattle plague—there were various explanations, including those far from correct, of its nature and different contexts of their usage. My aim here is rather to clarify that the contemporary understanding of cattle plague was more accurate, than in the case of cholera or human plague, for example. That alone was not enough, of course, and an effective administration was needed in order to implement theoretically useful measures, which was the hardest part.

The nineteenth century is generally viewed as a time characterized by the growth of local administration performing veterinary control. In the Russian empire such institutionalization emerged as a result of unintended consequences of measures against cattle plague.

Starting from the end of the 1860s, in the context of institutional reforms and under the international pressure, the Russian empire started to work energetically on the program of the eradication of cattle plague. This resulted in a law which was issued in 1879. It introduced into the Russian empire one of the most widely used measures in Europe since the eighteenth century, namely the compulsory killing of sick and suspected cattle accompanied by the renumeration of cattle owners involved. The implementation of the law was entrusted to zemstvos, local elective self-governmental bodies, which, as a result, started to hire many veterinarians. Although initially zemstvo veterinarians were supposed to work mostly on the implementation of the law, they gradually became involved in the treatment of other animal diseases as well. The development of local veterinary services, in spite of how limited they were, was the result therefore of not conscious policies aimed at that development but rather the outgrowth of measures against cattle plague, instead of animal diseases in general.

It was, however, another measure which led to the eradication of cattle plague within the European part of the Russian empire: the compulsory transportation of droves by railways and water, which was introduced in the middle of 1880s. Eliminating the main source of the spread of infection, this measure led to a drastic decrease of epizootics already at the beginning of 1890s—while in 1885 the loss of livestock caused by cattle plague amounted to 300,000, only 1800 animals died in 1890.[8] This success is an important exception to a failure to establish viable social policies in the second half of the century, usually ascribed to the Russian empire in historiography. But at the same time, it confirms the standard observation that the state was not able to reach deeply into the rural world as it appeared possible to eradicate cattle plague by other means.

Regarding the second theme of this thesis, i.e. the role of representations in the imperial rule, this study shows that there were important linkages between the pre-reform period and

[8] "Chuma rogatogo skota" in *Entsiklopedicheskii slovar' Brokgauza i Efrona* vol. 39 (Saint Petersburg, 1903), 53.

the times of the Great Reforms: those issues which had been discussed during the former acquired new prominence in the course of the latter. While the reign of the Nicholas I is often described as staunchly reactionary, some recent studies point to many important and diverse developments which occurred during the first half of the nineteenth century.[9] Many important ideas took their shape during that time and later played decisive roles in the epoch of the Great Reforms.[10] In addition to that, the first half of the century witnessed a considerable increase in the amount of publications on all kinds of topics. This had important implications for the diversification and proliferation of an array of the representations of the Russian empire.

Studies of the first half of the nineteenth century tend sometimes to accept the perspective of progressive activists and, thus, to view various developments only through the lenses of clashes and conflicts.[11] However, while the society and the state sometimes had competing views, both shared a common space of communication and common ideas and knowledge, which the two sides might have used for different purposes, though. Thus, the state should have been careful when using certain kinds of rhetoric and new ideas, often coming from Europe, as they might have been turned against its interests.

That it was dangerous for the empire to introduce new representations can be illustrated by the example of the fate of the famous Russian rural commune. In the 1840s the authorities of the Russian empire invited famous German scholar August von Haxthausen to visit the empire in order to present it to European audience in a favorable light. After Haxthausen`s book based on his travels in the empire was published in German and French in 1846 and then later in 1852, it became widely discussed by many Russian thinkers. Tracy Dennison argues

[9] Susan Smith-Peter, *Imagining Russian Regions: Subnational Identity and Civil Society in Nineteenth-Century Russia*, Russian History and Culture (Leiden: Brill, 2017); Catherine Evtuhov, *Portrait of a Russian Province: Economy, Society, and Civilization in Nineteenth-Century Nizhnii Novgorod*, (Pittsburgh, 2011).
[10] Susan Smith-Peter, "Defining the Russian People: Konstantin Arsen'ev and Russian Statistics Before 1861," *History of Science* 45, no. 1 (March 2007): 47-64.
[11] Idem, "Provincial Public Libraries and the Law in Nicholas I's Russia," *Library History* 21, no. 2 (July 2005): 103-19.

that Haxthausen depicted an idealized picture of rural life which became a basis for the so-called Peasant myth.[12] The main controversy this book instigated was that about the special place of the commune in the historical development of Russia. The image of the commune emerged in a favorable intellectual context and, thus, become the focal point of many schools of thought, including the Russian Populist movement, which viewed it as an embodiment of inherent Russian socialism. In addition to that, the question of what to do with the commune became the central in official policies towards peasantry. Thus, one single step of the state towards creating some powerful image of the not strictly political sphere of the Russian empire led to far-reaching unintended results.[13]

As this thesis shows, it was not only in the case of highly influential ideas that the same logic might have worked. During the first half of the nineteenth century many veterinarians published their plans for the eradication of cattle plague in the empire. One such project, namely the idea that the disease could be stopped through the inoculation of livestock in the steppe region, appeared to match some of the state`s calculations and the government decided to sponsor respective experiments, which, however, did not succeed. However, the closure of the project in 1864 left many of its active participants deeply unsatisfied, so they continued to seek for further opportunities to fulfill their expectations. In addition to that, the project enhanced local identities of some activists from the southern provinces. These identities, which were related to livestock breeding in certain regions, emerged even before the experiments began. The context of the Great Reforms provided those who believed in the perspectives of inoculation with a space for new claims, which, however were dismissed by the state. However, the introduction by the state of the compulsory killing of sick cattle was met by a considerable

[12] Tracy K. Dennison, *The institutional framework of Russian serfdom*, (Cambridge University Press, 2014), p. 6-17; T. K. Dennison and A. W. Carus, "The Invention of the Russian Rural Commune: Haxthausen and the Evidence," *The Historical Journal*, no. 3 (2003): 561-82.
[13] Igor` Khristoforov, *Sud'ba reformy: Russkoe krest'ianstvo v pravitel'stvennoi politike do i posle otmeny krepostnogo prava* (1830–1890-egg.) (Moscow, 2011).

opposition to this measure of some zemstvos, which backed their stance by suggesting inoculation instead. Thus, the state`s short-lived support for ideas which referred to scientific progress and promised the wholesale eradication of cattle plague backfired just within several years. Even though it is true that such challenge was far from undermining the state power at any significant level, this case might set a model for the further study of the role of knowledge and representations in the governance of the Russian empire and in interactions between the state and a society.

Many historians pointed to the important role of the representations of peasants in the justification of the viewpoints of different groups.[14] In this thesis I point to some observations regarding images of peasants related to epizootics. Already in the first half of the nineteenth century positive and negative images of peasants coexisted and were not necessarily in conflict with each other. I show that there was no consistent position of the state in that regard, although peasants were depicted in official documents exclusively in negative light. The explanation of such seeming paradox is that it was local medical authorities which disseminated negative depiction of peasants and central authorities were simply repeating them. Positive images of peasants could be found in texts of nobles describing epizootics in romantic style.

The implications of negative depictions of peasants, however, increased with the creation of zemstvos. As interactions between local activists who served in zemstvos and the state increased, the former became more influenced by the latter in the ways they perceived peasants. Thus, while in official documents peasants were often blamed for causing the spread of epizootics, some members of zemstvos reframed such clichés and represented the behavior of peasants as normal and rational. This suggests that none of the parties relied on a rigid image

[14] For example: Yanni Kotsonis, *Making Peasants Backward: Agricultural Cooperatives and the Agrarian Question in Russia, 1861-1914* (Houndmills, Basingstoke, Hampshire : Macmillan Press, 1999); Stephen P. Frank, "Confronting the Domestic Other: Rural Popular Culture and its Enemies in Fin-de-Siècle Russia," in *Cultures in Flux: Lower-Class Values, Practices, and Resistance in Late Imperial Russia*. ed. Stephen P. Frank, Mark D. Steinberg (Princeton, 1994), 74-107.

of peasants, but rather developed it on an ad hoc basis, depending on different contexts. An opposition, thus, was also an interconnection. In other words, images were not what really guided actions.

This case also shows that the word "state" poorly catches the complexity of the role of different state actors in producing certain ideas and images. While the state was embodied in different officials and institutions, there was no predictability regarding the ways in which they used representations in different contexts. In most cases justificatory narratives did not serve as important tools of power.

On the basis of these two cases, namely inoculation and representations of peasants, I argue that beyond the overarching symbols and rhetoric which explicitly celebrated royal family and imperial might which was embodied in officials and such institutions as the army there were quite a limited number of narratives with strong symbolical connotations which the state used. Veterinarians and activists who were inspired by various progressive thinking often tried to assert their own stances by engaging with, reformulating and attaching additional value to those issues which were in some ways touched by the state, both in the sphere of practice and language. While they hoped to attract the state`s attention, the latter preferred not to start any dialog, that is the empire avoided vivid representations. The reason was simple for the one who held the power: anything that nourishes the imagination of those whom the one controls might turn against the initial intention.

This is not to depict the Russian empire in positive terms. For it was a highly hierarchical and, in many ways, exploitative regime. The point is that it ruled, at least in the case I investigate here, not through commenting on something, but through keeping its voice low whenever it was suitable to do so. I argue not that the state tried to control all possible texts and narratives, but that it refrained from using the texts which proclaimed and justified something. To test this argument, it is necessary to study the ways in which the empire was

described by contemporaries in relation not only to political power, but also to all kinds of spheres of the function of society and the state.

The sources used in this thesis include texts written by scientists and any other persons which show major tendencies in the understanding of cattle plague and suggestions on how to combat it, legislation regulation measures against the disease, correspondence between Veterinarian branch of Medical Department of the Ministry of Interior on the hand and zemstvos and provincial governors on the other over the content of planned law about compulsory slaughter of sick cattle and published reports of zemstvos that describe the implementation of the law. I interpret these sources by adjusting them to the questions raised in the thesis, that is by looking at what they tell about the beliefs, spread and creation of information, the position and interests of the authors of texts within administrative hierarchies.

In the first chapter I trace the main legislative documents suggesting methods to combat epizootics. I show that the state neither produced any significant measures aimed at dealing with animal diseases, nor produced any coherent explanations or descriptions of them. The second chapter traces the institutionalization of veterinary medicine in the Russian empire during the first half of the nineteenth century cattle plague and points to the ways in which cattle plague became distinguished as a separate disease. It also analyzed veterinarians` and landlords` writings and considers the relationships between the function of the state and knowledge about cattle plague. The third chapter discusses the ways in which the earlier explanations and rhetoric regarding cattle plague were reconfigured during the epoch of the Great Reforms.

Chapter 1. The Epizootics are Noticed: Legislation, Administration and Medical Discourse During the Eighteenth Century

It was the eighteenth century during which the Russian empire took some steps towards the fight against epizootics, which gradually led to the inclusion of respective measures into a list of responsibilities of local authorities. This chapter investigates mostly decrees and laws regarding epizootics and traces changes in the understanding of the nature of animal diseases and in measures which authorities ordered to take against them. Explanations and measures regarding epizootics were unsystematic and haphazard, though something else could have been hardly expected given a general absence of properly functioned administrative system, especially in areas not close to Saint Petersburg or Moscow. These actions were a part of other concerns with which the central authorities were preoccupied, mostly cattle trade. Nevertheless, a look at how orders were issued one after another point to some, though quite slow, elaborations. Medical knowledge played very negligible role in the measure and all documents throughout the century did not distinguish cattle plague as a separate disease but mentioned epizootics (*skotskiy padezh*) as a general term for all diseases. Thus, this chapter contributes to the study of the state governance in the Russian empire during the eighteenth century by exploring how the state developed and engaged with the explanations of and measures against epizootics.

1.1.The First Steps: Regulations of Epizootics in the First Half of the Century

The earliest known attempt to fight epizootics in the Russian empire dates to 28 July 1730, when an order was issued that a particular outbreak should be dealt with.[15] There was reportedly an epizootic (*skotskii padezh*) of cattle and horses in Moscow province and several regimental chief officers were sent to the scene to inform voivodes and local people that appropriate measures should be taken. The officers were to order that all animals from effected and unaffected areas should have been prevented from contact. Dead animals were to be buried deep, without their skins being removed, which was a common prescription throughout Europe. However, if compared to measures employed in Europe, the measures mentioned in the order were rather partial: the method of isolation of health animals from the sick ones was not clearly explained, and fumigating was not even mentioned.[16]

This first consideration of the problem of epizootics by the authorities of the Russian empire happened several decades later than in most of the European countries. Moreover, this document was related to a single epizootic and did not make any difference for the rest of the cases. This probably reflects the state of medicine in the empire in general—it should be reminded that veterinary medicine had not been distinguished as a separate field anywhere in Europe at that time. Though, as it was in the case of European practices concerning fight against cattle plague, physicians might have taken part in the task, no such specialists in this instance were sent to combat epizootics. It is also telling that, in the document, no specific diseases were mentioned and both cattle and horses were considered to be affected by a single epizootic, requiring identical measures. While this specific case may have been anthrax, which

[15] *Polnoe Sobranie Zakonov Rosiiskoi Imperii* (PSZ), I, vol.8, no. 5599 (19 July 1730), 303-4.
[16] Clive A. Spinage, *Cattle Plague: A History*, 263-5.

affects both kinds of animals, it is more important that this document, as will be demonstrated, set a precedence for later descriptions of epizootics in eighteenth-century Russian empire.

The above analyzed case, however, did not force authorities to pay more attention to epizootics and they continued to apply ad hoc measures to rare cases which they considered. In July 1736 the Post Chancellery (*Iamskaia kantseliariia*) complained to the Senate that coachmen from Tosninsk post station (*Tosnenkyi iam*), located just outside Saint Petersburg on the road to Moscow, suffered great losses in horses due to an epizootic.[17] As cattle and sheep also died, this particular outbreak was probably anthrax. The Post Chancellery suggested that all state dispatches should be sent by waterway so that other horses would not contact the source of infection. While confirming the proposition, the Senate also ordered an additional measure, namely that a bypass road should be created so that no animals would go along the contaminated stretch of road. This precaution revels an awareness of preventive measures.

That epizootics rarely caught the attention of authorities is illustrated by the fact that another four years passed until the authorities considered one more rare case of epizootic. In August 1740 a Russian officer serving in Little Russia informed authorities in Saint Petersburg in a letter to the empress about the outbreak of an epizootic among cattle in some of the Little Russian and Sloboda Ukraine regiments.[18] Importantly, the officer reported that the misfortune was actually caused by several diseases and the central authorities did not ask to specify with which particular kind of diseases they were confronted. Thus, as in one of the previous cases, distinguishing a specific disease was not a matter of concern. In response to such information, orders were sent to local authorities in the regions affected by the epizootics that dead beasts should be buried with their skins not being removed. Notably, no horses were mentioned, which is rather an exception than the rule. As in the previous case, action resulted

[17] PSZ, I, vol.9, no. 7006 (9 July 1736), 875-6; On the Senate see: John P. LeDonne, *Ruling Russia: Politics and Administration in the Age of Absolutism, 1762-1796*, (Princeton, N.J. : Princeton University Press, 1984), 30-9.
[18] PSZ, I, vol.11, no. 8198 (9 August 1740), 214.

from a singular report rather than from the functioning of established administrative system instructed to fight against epizootics. Instead, rarely taken measures against epizootic were mediated by Saint Petersburg, which consumed precious time.

The three above-analyzed precedents, while shaping certain understanding of epizootics, did not result in the issue of general rules regarding animal diseases. Only five years later after the last case, in 1745, did policies regarding epizootics begin to take place. On 22 March the Senate received a report from the Little Russian General Army Chancellery dated to 28 February, almost a month earlier, according to which in six Little Russian regiments an impressive number of 72 000 cattle died because of epizootics.[19] In addition to that, the rest of regiments, reportedly, did not inform their losses. There is little doubt that such a high death toll was caused by cattle plague, though the authorities, following the usual pattern, did not attempt to identify the specific features of the disease they faced.

The Senate ordered that both local and Russian garrison army commands be sent to the places struck by the epizootics as soon as possible and undertake the prescribed measures immediately. They were to bury cattle, as it was usually ordered, but also, in order to save time, to burn corpses if there were forests nearby. The burning needed to be taken as quickly as possible so that bodies would emanate less amount of harmful odors. That authorities were impressed by the extent of devastation is evidenced by the unusual measure decreeing that all dogs from the affected areas should be killed and buried so that they would not harm healthy cattle and people in the impending hot weather. As in previous cases, no fumigation was suggested, even though the contagiousness of the unidentified disease was recognized. In tune with the usual connections drawn between epizootics of cattle and horses, the Senate also requested information if there were epizootics of horses or other animals. While these measures, in many ways, repeated those taken during the earlier cases, they add a new

[19] Ibid., vol.12, no. 9130 (27 March 1745), 350-1.

information about the ways in which the nature of animal diseases were understood. In particular, the warning that burning corpses might emit harmful odors suggests that the source of infection was seen to be dispersed throughout the air, which was the most common explanation of both human and animal infectious diseases, known as the miasma theory, which prevailed in Europe at the time. Such explanation of epizootics persisted in the Russian empire throughout the whole eighteenth century, as demonstrated below.

The Senate also suggested a number of preventive measures. According to them, all movement of cattle from and to Little Russia was to be banned. This measure disrupted considerably cattle trade as Saint Petersburg was cut off from important routes going across Little Russia. To recoup losses, the Senate issued an order that cattle should be supplied to Saint Petersburg from Olonets, Nizhny Novgorod, Kazan` and other provinces. Implementing the task of supplying livestock to Saint Petersburg in the summer of 1745, the Petrozavodsk Chancellery, at the request of the Olonets Voevoda Chancellery, sent an officer and a soldier to collect information about cattle in settlements in the possession of Olonets factories.[20] As it became apparent from their reports, cattle and horses in these regions were considerably affected by epizootics during that summer as well, though this was probably used as an excuse by locals for not sending animals to Saint Petersburg. Thus, the extensive measures concerning cattle trade, to which the authorities were forced by the outbreak of cattle plague in Little Russia, led to the discoveries of new epizootics which otherwise would have remained unnoticed by the central government. This suggests a close linkage between the combat against epizootics and the supply of meat to Saint Petersburg.

Upon learning about the new case of epizootics, the Senate banned the trade of cattle and meat from the Olonets settlements and ordered to inform peasants that they should bury dead animals. It seems that epizootics were also detected in Nizhny Novgorod province

[20] Ibid., vol.12, no. 9199 (12 August 1745), 440-1.

as the Senate also sent another order to both the Olonets Voevoda Chancellery and Nizhny Novgorod province. Apart from the standard prohibition of the movement of cattle and horses and order to bury corpses and isolate sick animals, the document prescribed the imposition of quarantines in areas struck by epizootics. Importantly, the authorities, unlike in the previous cases, also saw epizootics as dangerous to the health of people as the order prohibited to eat the meat of sick animals and suggested that removed skins could harm people rather than cause the spread of disease, which was the common logic behind the prohibition to remove skins.

The scale of epizootics in 1745, but more importantly, probably, the disruption of trade, finally pushed the government to pass the first law regulating epizootics in the Russian empire in general, not just in relation to a particular outbreak. The law was issued on 17 March 1746.[21] It was drawn up by the Medical Chancellery, which had not been mentioned in any of the previous cases considered here. However, even though the law described the measures to be taken in much greater detail than before, it was based mostly on the previous epizootics, especially that of 1745, as described in the documents above. As a result, the Medical Chancellery did not move away from reports and measures laid out in the context of precedents from 1730 onwards, but rather elaborated on them.

Nevertheless, the bill marked an important step in the development of policies regarding epizootics. It explained for the first time explicitly the ways of the spread of diseases causing epizootics, echoing, though, hints mentioned in the preceding documents. Even though horses were mentioned at the beginning and at the end of the text, the law referred predominantly to cattle—a clear influence of devastating epizootic of cattle plague in 1745 in Little Russia. Despite the recognition that epizootics usually affect only one species, it was stated that it would be safer to prevent all animals from contacts with sick beasts. According to the law, contaminated odors emanating from sick cattle were to be blamed for the spread of

[21] Ibid., vol.12, no. 9268 (12 March 1746), 529-33.

diseases. The prescribed measures, therefore, first and foremost concerned the fight against such odors that were mixing with the air and transmitting diseases. Only the suggestion that clothes could also transmit diseases, acknowledged that the source of infection was not necessarily airborne.

The law described in detail the methods of isolation and the destruction of bodies. As in the cases from the previous years, the movement of animals and people through affected areas was meant to be prevented by quarantines. Corpses were to be buried deep and far away from settlements because odors still could raise above the ground. To prevent this, graves were to be covered by lime. If epizootics were large-scale and resources scarce, then the less preferable burning of bodies could have been employed, especially since mass burial of cattle would occupy large parts of land that otherwise could be used for agriculture. That the disease was caused by odors was reinforced by the explanation that the large amount of it emanating from burning corpses could be harmful for people. To prevent the pollution of air with such infectious odors, resin powder or salt should have been added to flame. The bill also noted that it was important to consider the direction of the wind when avoiding contaminated air. Thus, the law added many details to measures which were basically known prior to its issue.

Despite the involvement of the Medical Chancellery, as in the previous years, epizootics and animal diseases remained entirely disconnected from medical discourse as no measures of treating animals were suggested. All measures were to be implemented by civil administration, military personnel and owners of cattle themselves. The hand of the Medical Chancellery is visible, however, in the recommendations related to the health of people. In order to attenuate the influence of contaminated odors, it was suggested that those who reside in affected areas should tar themselves and cover their faces and noses with tarred rag. Also, juniper berries were to be chewed and a mouth gargled with vinegar. Moreover, it was suggested that cattle owners should drink alcohol in order to relieve bad mood caused by the

losses of their livestock because sadness allegedly made people more susceptible to poisonous matters.

As these recommendations suggest, the Medical Chancellery connected the health of people with epizootics and suggested a number of proper treatments in order to support its standing in medical the sphere. It was implied that people needed to be taken care of during epizootics and it was the Chancellery that possessed an expertise required for this task. In addition to that, medical discourse helped to relate the evil of epizootics to the economic losses of the subjects of the Russian empire rather than to cattle trade, the safety of which was the primary interest of the Senate. Importantly, the emphasis on human health effectively separated the issue of epizootics into an entirely different sphere, implying that it was beyond the direct concern of the Medical Chancellery. Thus. the law did not attempt to elaborate on the nature of epizootics or diseases behind them but said rather vaguely that they would emerge "without a clear cause (*bez iavnoi viny*) and in an infectious manner".[22] While some of the European doctors had been trying to explain human and animal diseases through their comparison, the Chancellery preferred to abstain from giving a clear explanation for the epizootics, thus dropping animal diseases from their remit.[23]

The explanation for epizootics was also connected to the extent of the controlling policies of the state as defined by the law. While restricting the movement of cattle in order to prevent further infection, the law, paradoxically, attributed the responsibility for the emergence of epizootics only to the air spoiled by poison, without explicating the harmful consequences of the spread of diseases through intermediaries, such as cattle traders. Therefore, the precariousness of the world was to be blamed for the misfortunes, rather than the actions of subjects, the control of which were, thus, quite limited in the law. Aware of the absence of

[22] Ibid., vol.12, no. 9268 (12 March 1746), 529.
[23] Lise Wilkinson, *Animals and Disease: An Introduction to the History of Comparative Medicine* (Cambridge; New York: Cambridge University Press, 1992).

direct governance in provincial areas, the law obliged villagers to denounce each other for any concealment of the outbreak of animal diseases. While the law, of course, prescribed the public punishment of those who breach the norms, the emphasis was, however, on the burying of corpses, rather than on the tracing of the spread of epizootics over long distances.

While the Medical Chancellery in the 1746 law concentrated on the ways of fighting epizootics within a certain locality, new instances of the outbreak of epizootics revealed the need for regulations taking into account the movement of livestock over long distances for trade purposes. On 21 July 1747, the Senate, receiving reports that corpses were not buried and skins were removed during epizootics, emphasized the need to follow strictly the law issued in the previous year.[24] However, the Senate also issued additional regulations, which, again, were based on a particular episode setting a precedent. In the light of the fact that there was an epizootic of cattle in Tver` district, which was located by a busy road to Saint Petersburg, it was ordered that all herds of cattle moving to the capital should avoid that region. Also, the livestock that had already arrived to Ladoga and Novgorod, had to be checked for diseases by the Voevoda and Governor respectively before it could move on to Saint Petersburg. On the basis of this case, the Senate ordered that herds moving to Saint Petersburg or any other place should avoid roads going through areas struck by epizootics. It also decreed that cattle traders and landlords should receive documents given by Voevodas confirming that they move herds from regions which are not affected by epizootics. Such measures indicate that there was a degree of improvement, as compared to the earlier cases, of the control related cattle trade and epizootics. It seems that the Senate was willing to learn lessons from the precedents.

The regulations from the 1747 case are also important for they assumed for the first time that epizootics in certain regions could affect also herds moving from south towards Saint Petersburg. Such view reflected the fact that the Senate was concerned primarily with ensuring

[24] PSZ, I, vol.12, no. 9422 (21 July 1747), 722-4.

the arrival of healthy cattle to Saint Petersburg and much less with the livestock of peasants, for example. However, as will be elaborated later, it was precisely the herds on the way from the southern parts of the Russian empire that caused the outbreaks of cattle plague within rural livestock—as opposed to the Senate`s viewpoint. Cattle trade and epizootics were closely interlinked. Epizootics forced the state to pay more attention to cattle trade and vice versa.

Quite tellingly, the Senate prescribed that documents confirming the health of trade livestock were to be provided as quickly as possible and any delay was to be punished. Such protection of cattle traders was, however, a long-lasting practice aimed at ensuring the smooth supply of Saint Petersburg with cheap and sufficient meat. The law of 31 May 1733 regulated the trade of meat in Saint Petersburg and ensured that cattle traders and slaughterers have access to free pastures within and at the outskirts of the city.[25] In the law of 1734, the Senate, as a response to cattle traders` complaints, attempted to prevent the detrimental behavior of the owners of lands adjacent to trade routes in Little Russia and Sloboda Ukraine.[26] According to the law text, landowners considerably narrowed livestock routes by ploughing into them. This not only increased the size of land plots, but also allowed landowners to claim money and even cattle as remuneration for their pastures being touched by cattle traders` livestock.

The landowners` actions were not ungrounded as the *Sobornoye Ulozheniye*, the main source of the legislation in the empire, permitted the owners of pastures to detain strangers` animals feeding on their lands and to keep those animals if their owners refused to pay for spoiled grass.[27] However, cattle traders reportedly were also asked to pay for passing some stretches of roads and were beaten when refusing to do so.[28] As a remedy, the Senate ordered to widen livestock routes to 21 meters, whereas the width of other types of roads should have been only 6.5 meters. The landowners were to place some barriers between routes and

[25] Ibid., vol.9, no. 6426 (31 May 1733), 149-55.
[26] Ibid., I, vol.9, no. 6600 (5 July 1734), 565-72.
[27] Ibid., I, vol.1, no. 1 (29 January 1649), 49-50.
[28] Ibid., I, vol.9, no. 6600 (5 July 1734), 568.

their pastures and therefore all further claims for damaged pastures were outlawed. Complaints, however, continued to arrive and the Senate issued additional regulations on 7 October 1741.[29] This time, the Senate placed the responsibility for charging illegal levies not only on the landowners, but also on local officials, including Voevodas. According to new measures, cattle owners were to receive documents stating that they are moving herds to Saint Petersburg and they also acquired the right to require in each city soldiers that would safeguarded them on their way. These regulations were also confirmed in 1743.[30] Therefore, the emphasis on economic significance of cattle trade and precautions against unnecessary control over droves of cattle by local authorities contributed to the authorities` neglect of the potential role of trade herds in infecting areas along their way to Saint Petersburg.

Further regulations continued the patterns of regulations related to epizootics laid down in the cases described above. The law created by the Medical Chancellery did not change the general strategy of dealing with epizootics. The reports to which the Senate was responding show that there was no single administrative body or system responsible for fighting epizootics on local levels. The law from August 1747 ordered all kinds of local authorities to report about epizootics to the Senate and those close to Saint Petersburg and Moscow to the Court Horse Office and the Horse Chancellery.[31] Despite such prescription, in March 1750 the College of Foreign Affairs sent to the Senate a report about the outbreak of epizootic, which the College, in turn, received from the Little Russian General Army Office.[32] The Senate was, however, displeased that the General Army Office did not report further about the implementation of measures against epizootics, which reflects the inadequacy of center-periphery communication.

[29] Ibid., vol.11, no. 8457 (7 October 1741), 516-21.
[30] Ibid., vol.11, no. 8778 (12 September 1743), 887-92.
[31] Ibid., vol.12, no. 9433 (17 August 1747), 747-8.
[32] Ibid., vol.13, no. 9716 (15 March 1750), 202-3.

The issue of epizootics still sometimes escaped the attention of the Senate. In July 1748 the Imperial Majesty's Cabinet responded to the report of general-commander-in-chief (*general-politsmeister*) of Saint Petersburg informing about the epizootic of cattle in the city. The Cabinet responded with recommendations which did not echo any of the previously issued orders by the Senate. It prescribed local inhabitants not to walk cattle to pastures until sunrise and to smear tar on animals` nostrils.[33] Some local authorities also were not sure about the ways of informing the Senate about epizootics. In December 1748 the Bakhmut Proviant Chancellery sent a report about an epizootic marked as "secret".[34] On the basis of this precedent, the Senate ordered that all reports concerning epizootics should not be regarded as secret, since such matter was the public one and all subjects should have been informed about the ways of fighting against it. Epizootics, thus, were considered to be a problem, the solution of which should have involved the efforts of all kinds of authorities as well as commoners.

The Medical Chancellery should not have been involved obligatorily in combating epizootics and its recommendations were not quite in agreement with the Senate main purpose, namely to secure the livestock trade. The Senate, however, was not reluctant to rely on the expertise of the Medical Chancellery in the interpretation of animal diseases, especially in their relation to human health. In the case from July 1756, the Senate confirmed the report of the Medical Chancellery in which it recommended to fight against epizootics of horses by the means of the standard measures of isolation and bury of corpses, while making an emphasis on the prevention of harm to the health of people, something which could be rarely found in the prescriptions drawn up by the Senate alone.[35] While in the law of 24 July 1756 the Senate cautioned that people should avoid touching horses and cattle which died from epizootics and described in details how corpses should be buried without endangering humans, it mentioned

[33] Ibid., vol.12, no. 9518 (20 July 1748), 808.
[34] Ibid., vol.12, no. 9558 (9 December 1748), 946.
[35] Ibid., vol.14, no. 10.581 (11 July 1756), 594-5.

the Medical Chancellery as important sources of reports concerning this issue.[36] In an order from July 1761 the Senate warned the officers of police squads about considerable punishment in case they would allow any corpses of horses or cattle on the streets of Saint Petersburg, since, as the Medical Chancellery informed, flies could transmit a disease from such dead animals to people.[37]

As before, the Senate was concerned mostly with the trade routes heading to Saint Petersburg. The order from 15 March 1750 on epizootic in Little Russia, while mentioning that previous prescriptions should be followed, made a special emphasis on the restrictions of the movement of livestock.[38] On 7 July 1755, the Senate, responding to five reports sent from different regions, prescribed that no livestock on its way to Saint Petersburg or any other place should move through affected areas.[39] To curb intensive epizootics during summer 1756, the Senate prescribed to send agents to travel along roads to Saint Petersburg in search of corpses of animals dead from epizootics.[40] It seems also that the law form 21 July 1747 secured the position of cattle traders as in no other cases it is mentioned that they should be subjected to any specific regulations. It is telling that in one of the orders the Senate prescribed to watch that local inhabitants do not leave unburied corpses along roads, while those who were actually responsible for this were clearly cattle traders.[41]

In July 1756, lieutenant Count Meshcherskii, who was sent to control the movement of cattle moving to Saint Petersburg, made some unusual for his time observations.[42] He reported that many horses heading to Saint Petersburg die because of animal diseases and infect the cattle of local inhabitants. He also noted that Steppe Cattle, that is the livestock moving

[36] Ibid., vol.14, no. 10.589 (24 July 1756), 603-4.
[37] Ibid., vol.15, no. 11.286 (6 July 1761), 746-7.
[38] Ibid., vol.13, no. 9716 (15 March 1747), 203.
[39] Ibid., vol.14, no. 10.432 (7 July 1755), 385-6.
[40] Ibid., vol.14, no. 10.582 (12 July 1756), 596-7.
[41] Ibid., vol.14, no. 10.582 (12 July 1756), 596-7.
[42] Ibid., vol.14, no. 10.591 (26 July 1756), 604-5.

from the southern regions of the Russian empire, could not be affected by horses and Russian cattle, that is livestock belonging to the local population. He, therefore, firstly, observed that not only animals moving to Saint Petersburg could be infected in some areas struck by epizootics, but also vice versa, and secondly, distinguished for the first time different breeds of cattle in relation to epizootics, implicitly suggesting that herds moving to Saint Petersburg cannot be harmed by livestock belonging to cattle owners residing along the trade routes. The Senate, however, ignored these observations and prescribed usual rules of not allowing cattle from dangerous areas to Saint Petersburg. Saint Petersburg and its outskirts attracted the unequal share of the authorities` attention not only in relation to cattle trade but also in regard to epizootics in general. In July 1761 the Senate, apart from standard measures, prescribed to kill immediately all sick animals and to bury them.[43] This measure—quite popular in Europe—was, however, confined to one instance of epizootic in Saint Petersburg and was not prescribed for the rest of the empire.

Thus, activities aimed at combat against epizootics, which the state had been taking for more than 30 years since the 1730s did not result in more or less consistent approach to the problem, but they nevertheless point to developments based on a set of the precedent cases prescribing measures one after another.

1.2. Medical Discourse is Established in the Empire

The beginning of 1764 was marked by the introduction of considerably new measures. This coincided with the creation of the Medical Collegium at the end of 1763, which replaced the Medical Chancellery. The Senate decided to change the usual ways of dealing with epizootics and to rely instead on the scientific knowledge of the Academy of Science and

[43] Ibid., vol.15, no. 11.286 (6 July 1761), 746.

the newly created Collegium. Using the cases of the outbreaks of epizootics of cattle in several regions as an excuse, the Senate already in January 1764 requested from these two institutions to suggest their solutions to the problem.[44] The response of the Medical Collegium is extraordinary for its break with the previous regulations maintained by both the Senate and the Medical Chancellery. Aiming at securing its power through the prestige of science, the Collegium and the Academy were not reluctant to expand its expertise by engaging with animal diseases, whereas the Medical Chancellery had been merely commenting on dangers to human health during epizootics.[45]

The response presented by the Collegium consisted, apart from a brief mentioning that sick animals should be separated from the healthy ones, mainly of various recommendations of how to take care of sick cattle. Unlike in the previous cases described above, the Collegium did not mention that precedent cases should have been consulted.[46] At the same time, as in earlier legislation, the Collegium did not elaborate on the nature of a disease against which it was suggesting remedies. The interest of the Collegium in animal diseases, therefore, was still quite limited.

The Academy of Science, however, appeared to be much more enthusiastic. While fully agreeing with the Collegium`s suggestions, it proposed also to publish and to sent to local authorities the translation of the "Collection of the Best Recommendations and Remedies Against Epizootics of Cattle".[47] The Senate approved such suggestion and ordered such collection to be consulted by all authorities during the future cases of epizootics and that apothecaries administered by the Medical Collegium should provide medicines mentioned in the "Collection".[48]

[44] Ibid., vol.16, no. 12.032 (31 January 1764), 511.
[45] Ibid., 512.
[46] Ibid.
[47] Ibid., 511.
[48] Ibid.

The "Collection", however, did not resemble decrees usually issued by the Senate at all. It did not even contain a single set of rules but was comprised instead of several unrelated writings. It also included expansive descriptions of the pathology of cattle diseases, which could have been of little help to non-specialists. But such medical, undoubtedly, vividly signified the status of the Academy.

Two of the recommendations were written by foreign doctors serving in the Russian empire. Johann Friedreich Schreiber (1705-1760), graduate of Leiden University, was the author of short prescriptions against epizootics of cattle. He framed his text within standard medical discourse at that time in the Russian empire, pointing to the harm caused by epizootics to the state and arguing that true knowledge based on science should prevent unenlightened treatment of animals.[49]

Unlike the Medical Chancellery, Schreiber attempted to disconnect epizootics from human health and to present them as a distinct sphere requiring the knowledge of the ways of the treatment of cattle. In contrast to the previous assumptions that epizootics could be harmful to people, he argued that both cattle and horse diseases pose no danger to humans.[50] In addition to that, he recommended not to cover corpses by lime as this would facilitate the spread of poisonous odors—quite the opposite to what the Medical Chancellery had prescribed in the law from March 1746.

At the same time, he recognized that isolation was the best way of preventing the spread of epizootics, an idea widely held in the earlier legislation. There was also continuity with the previous decrees in the way he understood the nature of animal diseases—they were caused by harmful odors. An important novelty was, however, a list of the methods of the

[49] Andreas Renner, "The Transfer of Medical Charlatanism to Eighteenth-Century Russia," *East Central Europe* 40 (2013): 245-267.
[50] PSZ, I, vol.16, no. 12.032 (31 January 1764), 512-3.

treatment of cattle—clearly, a manifestation of the Schreiber`s willingness to assert his medical expertise.

Abraham Kaau-Boerhaave (1715-1758) was also the graduate of Leiden University and in 1744 he became the member of the Russian Academy of Science. His posthumous contribution to the collection was his observations of epizootic of cattle in Holland in 1744-1745. Although he recognized that he did not have any information about the nature of epizootics in the Russian empire, he stated that his experience with epizootics in Holland might have been still be important to look at. Thus, it was not a concreate disease that was important when dealing with epizootics but rather a locality where it could occur.

Kaau-Boerhaav relied on medical discourse more extensively than other authors. He provided meticulous observations of the pathology of cattle disease he dealt with and suggested several remedies, which he allegedly employed with considerable success in Holland. Tellingly, he even did not mention the isolation of sick cattle. [51] Intended clearly for the specialists, the authorities, nevertheless included redesigned this text into formal prescriptions, reveling a high level of credibility the Academy of Science enjoyed at that time.

The "Collection" also contained "Guidance of How to Act in the Case of Epizootics of Cattle" published, tellingly, by Königsberg Medical Collegium. The "Guidance" presented in many ways similar kinds of medical treatments to those suggested in the works by Schreiber and Kaau-Boerhaave, emphasizing especially the method of bloodletting. However, unlike the above-mentioned doctors serving in the Russian empire, it paid considerable attention to the isolation and disinfection. [52] Apart from that the "Collection" also contained three more descriptions of medical treatments and medicines aimed at the prevention of cattle diseases,

[51] Ibid., 513-20.
[52] Ibid., 520-22.

which reinforced the general incoherence of the document consisting of the patchwork of various recommendations.

The "Collection" is also noteworthy because it presents the first clear instance of the transfer into the Russian empire of European knowledge related to epizootics. Mediated by the Academy of Sciences and the Medical Collegium this knowledge was, however, confined mostly to the sphere of medical discourse. While approving such texts, the Senate remained ignorant of the European experience with police measures with which it had been mostly preoccupied before the 1760s. Moreover, recognizing the scientific authority of the Medical Collegium and the Academy of Sciences, the Senate accepted their recommendations as the major directions to follow from then on in spite of the fact that the "Collection" completely avoided the issue of the function of the state administration and the regulation of cattle trade, which had been of paramount importance for the Senate during the previous years.

The Senate`s order from April 1770 points that, in contrast to the first half of the century, it stopped to see epizootics a part of responsibilities of local authorities. Mentioning that the "Collection" was published for "rural inhabitants", the Senate ruled out any involvement of local authorities in fighting epizootics. The order also suggests that suggests that the Medical Collegium was delegated with the responsibility to react to reports from local authorities concerning epizootics.[53] The problem of epizootics, thus, started to be seen as related exclusively to medical and scientific realm rather than administrative. In 1770, the Collegium informed the Senate that despite the publication of the aforementioned "Collection", epizootics continued to affect different regions of the empire. It claimed that the reason for the ongoing reemergence of animal diseases was in the low ceilings in cowsheds, which, in combination with peculiar local weather which was often changing from hot to cold could

[53] Ibid., I, vol.19, no. 13.446 (12 April 1770), 52-3.

instigate devastating epizootics.[54] This idea reflected growing concern with the weather as one of the main factors influencing the course of diseases, which became widespread in the second half of the eighteenth century,

As earlier in the "Collection", in 1770, the Medical Collegium again mentioned that the state was the major victim of epizootics, reflecting the identity of physicians as first and foremost the servants of the state. The Senate fully accepted the Collegiums` suggestions and prescribed to build cowsheds with higher ceiling and not in marshy places and lowlands, to keep cowsheds clean and ventilated and to not exhaust cattle with bad fodder. Only in the last sentence of the document, the need to keep sick and healthy animals separately was mentioned.[55] Epizootics, thus, were imagined as local problem that needed to be resolved by the means of the proper treatment of cattle, excluding any role of local authorities in fighting them. Such attitude is also apparent from the travelogues of famous foreign scientists who served in the Russian empire.

Peter Simon Pallas, a member of the Academy of Sciences, who famous for his travels aimed at the study of natural history, visited Vasilov Maidan, a village to the south of Nizhniy Novgorod, on 30 August 1768.[56] He found there a still active epizootic of cattle and observed that the outbreaks of epizootics in that region occur in villages along a river recurrently. Pallas explained that epizootics were caused by wet pastures and bad treatment of cattle because no epizootics could have been found in territories other than lowlands. Thus, he framed his explanation within medical discourse exclusively, while not mentioning police measures at all. Characteristically, Pallas regretted that locals did not take any measures, while remaining silent about the role of authorities.[57]

[54] Ibid., 52.
[55] Ibid., 53.
[56] Peter Simon Pallas, *Puteshestvie po raznym provintsiiam Rossiiskoi imperii*, vol.1 (Saint Petersburg, 1773), 94.
[57] Ibid.

Samuel Gottlieb Gmelin, also a famous traveler, in November 1768, after he learned that there was an epizootic of cattle, visited a village called Borshchevo, located to the south of Voronezh.[58] Similarly to Pallas, he suggested that lowland area and wet summer were the causes of the misfortune and pointed to the fact that there was a similar kind of summer weather six years ago in that region, when there was also an epizootic there. After examining the internal organs of a dead cow, Gmelin concluded that he faced "the so-called cattle plague (*skotskaia morovaia iazva*)".[59] Like a truly competent doctor, he connected pathological changes in the cow`s body to wet fodder, which reportedly changed the animal`s balance of liquids.

As in the case of Pallas, locals allegedly did not take any actions. Gmelin was happy to inform that he had with him medicines aimed to squeeze out unnecessary liquids from sick cattle. However, locals, despite the order of a governor to follow Gmelin`s recommendations, refused to treat their cattle with medicines and some of them fled the village. Gmelin`s sincere wish to help unfortunate cattle owners with the application of reportedly deep knowledge of the nature of the disease was not realized because of the alleged stubbornness of unenlightened people. Thus, he implied the missed opportunity for medical knowledge to perform its power was.

In April 1769 Gmelin again learned that there was an epizootic of cattle, this time, in a village called Yablonovka located to the south of Voronezh.[60] One hundred cattle died there. Locals moved the rest of livestock several kilometers away from the village, so Gmelin decided to go there. He conducted the autopsy in order to find out whether this epizootic was the same as the one that he encountered earlier. However, as respiratory system appeared to be severely affected, he concluded that he encountered nothing else, but pneumonia. Unlike in the

[58] Samuel George Gottlieb Gmelin, *Puteshestvie po Rossii dlia izsledovaniia trekh tsarstv estestva* vol. 1, Puteshestvie iz Sanktpeterburga do Cherkaska, glavnago goroda donskikh kozakov v 1768 i 1769 godakh (Saint Petersburg, 1771), 64-66.
[59] Ibid., 65.
[60] Ibid., 124-129.

previous case, Gmelin was not sure what was the cause of the emergence of this disease. However, it was important for him to note that it was quite different from "real plague", which was much more infectious and long-lasting and, therefore, required different type of remedies.[61]

In stark contrast to his previous encounter with an epizootic, most probably cattle plague, this time Gmelin claimed that treating animals was out of his competence as it was obvious that this sphere was absolutely unexplored.[62] That Gmelin was confident about the interpretation of and remedies against cattle plague but then was hesitant to take any actions when facing pneumonia should be explained by the fact that he was able to rely on the guidance provided by the Medical Collegium and the Academy of Sciences in the first case, while the luck of knowledge forced him to limit his authority in the second case.

Gmelin said that the only thing he could do was ask the local governor to send to Yablonovka some physician. Such physician should, according to him, conduct the autopcy, like Gmelin himself did, in order to identify a disease and then to apply a proper remedy. He shared his thoughts that such treatment could be of great help in the fight against epizootics of cattle, which cause a considerable harm to the Russian empire.[63] The connection of the expertise of physicians to their service to the state, thus, helped to imagine epizootics as a problem related to the Russian empire in general, rather than to some particular sphere, such as the trade or well-being of people, issues with the authorities connected epizootics during the first half of the century. Additionally, Gmelin, by praising the order of the Medical Collegium to local physicians which prescribed them to fight epizootics, he underscored the important role of the Collegium one more time. Although he recognized that some time was needed for

[61] Ibid., 126.
[62] Ibid., 127.
[63] Ibid., 128.

such order to bear fruits and suggested that some physicians should be appointed and taught to treat animal diseases specifically.[64]

The dominance of the medical discourse persisted also into 1770s. In 1774 the Commission for the prevention and treatment of plague assembled in the wake of infamous epidemy of plague in Moscow in 1770-1772 published "Short Manual on How to Prevent Epizootics".[65] The above-described shift in the approach to epizootics had a major impact on the "Short Manual", while, at the same time, the context of disastrous plague epidemy slightly influenced the perception of animal diseases.

As obvious borrowings suggest, the Commission relied mainly on the above-analyzed "Collection". While mentioning some standard measures, the Commission also came up with rather original ideas. For example, it suggested that cowsheds and other objects which possibly transmit infection should be cleaned and disinfected and cattle should be washed.[66] This caution indicates the understanding of animal diseases as caused not by dangerous odors but rather by some physical matter. A rather odd idea that cows or bulls could infect animals only of their respective sexes is also peculiar exclusively to the "Short Manual".

Although the intervention of the Medical Collegium and the Academy of Sciences into the issue of animal diseases was characterized by the rejection of connections between epizootics and human health, the primary interest of the Commission in human diseases influenced this viewpoint. The Commission explicitly connected its recommendations to the need to protect people from the potentially harmful impact of epizootics of cattle and horses, which were affecting Moscow province at that time.

[64] Ibid., 129.
[65] "Kratkoe nastavlenie kakim obrazom skotskii padezh otvrashchat', sochinennoe ot Kommissii dlia Predokhraneniia i Vrachevaniia ot morovoi iazvy. V Moskve 1774 goda.", in Shafonskii Afanasii. *Opisanie morovoi iazvy, byvshei v stolichnom gorode Moskve s 1770 po 1772 god: S prilozheniem vsekh dlia prekrashcheniia onoi togda ustanovlennykh uchrezhdenii* (Moscow, 1775), 588-598.
[66] Ibid., 590.

The "Short Manual", however, continued to view epizootics as primarily medical problem, disconnected from the work of authorities. Thus, it did not refer to any concrete laws which could have be consulted by either population or the local administration. While it was common practice to mention the law of March 1746, which was prepared by the Medical Chancellery in the first half of the eighteenth century, the turn to abstract medical knowledge at the expense of more rigid administrative measures loosened the role of more state-oriented step-by-step prescriptions.

The second half of the eighteenth century was also marked by the appearance of the first written interpretations of epizootics which were unrelated to the activities of the state or the doctors in its service. For example, Andrei Bolotov, one of the most active members of the Free Economic Society, paid a lot of attention to epizootics in instructions for bailiffs of landlord estates published in 1770.[67] Remarkably, Bolotov`s recommendations, clearly, were not influenced by the medical discourse, which, as it is demonstrated above, was dominant at that time.[68] Instead, he suggested a number of preventive measures which aimed at keeping animal diseases away from the estates, rather than fighting epizootics as such. Not only Bolotov came up with rather original recommendation on the prevention of epizootics, but he also depicted them as related to the private economic interests, without giving any significance neither to state nor to physicians. That Bolotov, who was extremely interested in many topics related to science and agriculture, did not rely on prescriptions of the Academy of Science and the Medical Collegium points that the medical discourse possibly did not reach a broader audience beyond the doctors themselves. In addition to that, as the next chapter demonstrates, the prominence of the medical discourse appeared to be short-lived in any case.

[67] "Sochinennyi Gospodinom Kapitanom Bolotovym nakaz dlia dereveskago upravitelia," in *Trudy vol'nogo ekonomicheskogo obshchestva*. vol. 16 (1770), 142-144.
[68] Ibid., 143.

1.3. Administrative Approach Returns

Despite all the inconsistencies in the ways in which the authorities dealt with epizootic during the period discussed below, those precedents appeared to significant in the context of the Catherine`s the Grate administrative reforms in the 1770s and 1780s. On 19 December 1774 the government issued the "Instruction to hundredsman and his subordinates" (*sotskie s tovarischi*), peasants elected within their communities to perform police duties delegated to them by the state.[69] The bill`s seventh article formulated actions needed to be taken in the case of epizootics. Such integration of the problem of epizootics into the function of the emerging administrative structure brought back the non-medical measures which were formulated or mediated by the Senate from the 1730s to the 1750s, before the Medical Collegium took the initiative.

This return, however, exposed the haphazard character in which the measures were formulated on the basis of earlier cases and laws. For example, while the regulations issued in the first half of the century prescribed that sick animals should have been taken out from settlements, the "Instruction" reversed such order and prescribed actually to move healthy livestock. In addition to that, referencing the decree of 15 July 1756, it ordered to shot and bury all sick animals, while the mentioned decree, in fact, did not contain anything similar to such measure. That sick animals should be killed was mentioned in legislation few years later than 1756 and in relation to a particular case of epizootic in Saint Petersburg.

Some influence of medical discourse could be still identified in the "Instruction", but it was limited only to the recommendation to do bloodletting. Moreover, the "Instruction" prescribed to cover buried animals with lime, an idea that was dismissed in the publication of the Academy of Sciences but was recommended by the Medical Chancellery instead.

[69] PSZ, I, vol.19, no. 14.231 (12 April 1774), 1072-3: On *sotskie* see: LeDonne, *Ruling Russia*, 53-4.

Further administrative changes delineated the responsibility to fight epizootics among other local authorities as well. The famous territorial and administrative reform of 1775 assigned this task to the head of the district police.[70] It prescribed the measure of isolation, to bury dead cattle and to prohibit the movement of cattle through affected area. It also noticed that, in general, laws from 1746, 1771 and 1774 should be followed, ignoring, however, possible contradictions between those decrees and quite different context in which they were produced.

The most important reform in regard to epizootics was the establishment of medical boards in each province in 1797.[71] Significantly, the regulations of the jurisdiction of local physicians working in the boards were concerned only with their administrative duties, while not mentioning the issue of medical knowledge at all. Quite tellingly, the instruction even did not distinguish between the ways in which human and animal diseases should be approached and simply mentioned that the both should be taken care of.

Despite the relative prominence of medical discourse during the decade from the middle of the 1760s onwards, eventually, the state did not internalize and regularize such discourse. Medical knowledge remained a matter of physician`s training and his communication with the Medical Collegium, but not the subject of control and regulations. While some medical recommendations were suggested in some of the regulations issued before the reforms of the 1770-1790s, the Russian empire did not regard such recommendations as a subject to any substantial control. What was important for the empire instead, was to establish a hierarchical structure that would embody any justify any sort of knowledge on which local authorities would prefer to rely. The rule became more regionalized, so did the approach to the fight of epizootics.[72] It is telling that among the tasks of medical boards was to collect

[70] PSZ, I, vol.20, no. 14.392 (7 November 1775), 253-4.
[71] Ibid., vol.24, no. 17.743 (19 January 1775), 287-96.
[72] On the reform of local authorities see: LeDonne, *Ruling Russia*, 3-24.

topographical information about their respective provinces that would explain the regional roots of diseases.

It is by no accident, therefore, that in September 1797 the order to take more active measures against the outbreak of epizootics of cattle was sent to the governors of several provinces.[73] Paradoxically, while in the first half of the century, the Senate, though acting from the perspective of capital-centered logic, issued regulations aimed at controlling the movement of cattle encompassing several regions this time it sought to fight epizootics in each separate region. The Senate was still at the top of hierarchy—in 1783 it requested local authorities to mention in their reports numbers of cattle which died from epizootics—but it was comfortable with simply receiving reports rather than prescribing ad hoc regulation as it did from the 1730s onwards.[74]

The second half of the eighteenth century further proved the inclination of authorities towards protecting the interests of cattle traders, thus keeping a gap disconnecting them from the outbreaks of epizootics intact. In September 1765, an order ensuring that cattle traders had free access to pasture along livestock routes and that no one was taking advantage of them was issued.[75] An additional document reminding that cattle traders should not be disturbed was issued in 1797.[76]

To sum up, the Russian empire did not develop consistent response epizootics during the eighteenth-century Instead, this problem was integrated into the standard patterns of the function of the official bodies, which still reflects though, the willingness of the state to turn to spheres which had not been a part of the state governance before. Ad hoc measures of the first half of the eighteenth century considered cases related mostly to areas near the capital cities. This fact, as many other spheres of the state control, exposed the imbalance of

[73] PSZ, I, vol.24, no. 18.168 (28 September 1797), 753.
[74] Ibid., vol.22, no. 15.892 (11 December 1783), 1070-1.
[75] Ibid., vol.17, no. 12.473 (16 September 1765), 328.
[76] Ibid., vol.24, no. 18026 (1 July 1797), 643.

governance between the capitals and the territories beyond them. While the medical discourse, which defined the state`s approach to epizootics during the 1760s, contributed to the definition of epizootics in abstract terms, it failed to gain influence in the long run. A short-term resort to rhetoric with such strong claims regarding progress as those characteristic to the medical discourse was something that the state would never do again from the eighteenth century onwards.

The extensive administrative reforms of the last quarter of the century integrated epizootics into the jurisdiction of local authorities. This was, however, a continuation of previous administrative dynamics rather than the influence of medical discourse. Eventually, the medical knowledge did not play any significant role in the ways the state framed epizootics as a part of its governance. Andreas Renner argues that despite the fact that the actual impact of physicians, the number of whom began to increase significantly around the 1750s, on the treatment of diseases was negligible, they nevertheless, were an indispensable part of many spheres of state governance and the source of justificatory narratives of enlightenment.[77]

In the case of veterinary medicine, however, the capacity of the Russian empire to transfer people and ideas from Europe appeared to be too weak to form a separate group of professionals, though it should be remembered that institutionalized veterinary medicine emerged only in the middle of the century.

[77] Andreas Renner, "Progress through Power? Medical Practitioners in Eighteenth-Century Russia as an Imperial Elite, in *Acta Slavica Iaponica* 27 (2009), 29-54.

Chapter 2. Cattle Plague Defined and Challenged: State, Society and Veterinary Medicine in the First Half of the Nineteenth Century

Alison Smith shows that the content of *Gubernskii vedomosti*, an official provincial paper established in the second quarter of the nineteenth century, had a tendency to depict the Russian empire in the ways which breached strictly official and bureaucratic image of the state.[78] This valuable observation, I argue, could be productively applied also to any kind of published materials, both produced by the state and based on private initiative. It is usually self-given that the reign on Nicholas I was characterized by strict censorship. An angle of view, however, that stresses the fact that the goal of the censorship was to allow for publishing not exclusively what the state expected to circulate, but more importantly what was not prohibited allows to shift the attention from the dichotomy of official and alternative to the official to the fact that a lot of the descriptions of the Russian empire not easily fall into either of the two. This chapter investigates the ways in which the Russian empire developed and institutionalized its attitude towards cattle plague, what and for what reasons descriptions of the disease were written beyond strictly official documents, and what were the relationships between knowledge and representations and the state governance. It argues that there was a heterogeneity of ideas and representations to the extent that they blur distinctions between official and unofficial positions. However, on the level of state administration such distinctions were drawn clearly, though still leaving a small room for dynamics.

[78] Alison K. Smith "Information and Efficiency: Russian Newspapers, ca. 1700-1850" *in Information and Mechanisms of Communication in Russia*, 1600-1850, eds. Simon Franklin and Katherine Bowers, (Cambridge: Open Book Publishers, 2017), 185-211.

2.1. The State is Getting Interested in Cattle Plague

In this subchapter I trace the development of the institutionalized veterinary control in the first half of the nineteenth century in the Russian empire. As the state created opportunities for receiving veterinary education, this led to the emergence of a group of professional veterinarians, many of whom filled the positions local authorities. While this resulted in an identification of cattle plague as a separate disease, there was established no general explanation or description of epizootics. Neither did the state try to impose such. As the undergovernence still persisted, the outbreaks of cattle plague did not decrease, and cattle traders were not restricted considerably in their activities. The importance of local medical/veterinarian authorities was, however, that they generated rhetoric that explained whom and what to blame for epizootics. These explanations were disseminated without a consistent intention of authorities and different actors started to use or implicitly argue with them for their own purposes.

2.1.1. The Protection of Cattle Traders Continue

The Ministry of Internal Affairs, which was created in 1803, continued, as the Senate did during the previous century, to favor and protect the enterprises of cattle traders. The reason behind this was simply to ensure the low prices of meat. As before, new regulations were always triggered by complaints from traders, to which the authorities were quite sensitive.

One such occasion resulted in detailed regulations of the drove to capitals, i.e. Saint Petersburg and Moscow, which was issued on 14 June 1804.[79] The law prescribed that special

[79] PSZ, I, vol.28, no. 21.347 (14 June 1804), 375-8.

functionaries (smotritel`) should be appointed in each province, whose task was to regulate specifically the movement of cattle. They were to ensure that herds did not face any obstacles on their way and that no illegal fees were charged from cattle traders. The functionaries were also supposed to issue certificates to cattle owners in provinces from which they were starting droves towards the capital cities. The certificates were also needed to be sent to a local and adjacent province on the way of herds. This was to ensure the repeated control over the movement of cattle in each province and proper collection of statistics.[80]

The new regulations aimed at the secure position of cattle traders differed from the previous ones, however, on the issue central to this thesis: epizootics. In fact, this document is the first one among known to me which speaks specifically about cattle plague instead of vague "epizootics", identifying, thus, a concrete disease. The functionaries should have received a confirmation from cattle traders that they would take all necessary preventive measures in the case of cattle plague and to inform the nearest functionary about the disease. The functionaries, together, with doctors were also supposed to inspect herds for infectious disease and keep those animals which displayed some signs of weakness until they would recover. The rest of the herds should have proceeded without unnecessary delays.

It is not clear, however, what exactly the purpose of such control was. Was it to protect local cattle from cattle plague or to ensure the safety of herds? It is telling, though, that the document mentioned only that cattle owners should separate sick cattle, but not prescribing that corpses should be buried, pointing only to vague "other precautions". Moreover, the law was clearly concerned with fast advancement of cattle towards Saint Petersburg and Moscow. Nobody, including the police, had the right to stop cattle traders. Unlike in the first half of the eighteenth century, there should have been no changes of the routes of droves, not to mention the prevention of the movement of livestock as such. That the authorities were concerned with

[80] Ibid., 376.

the state of health of herds first and foremost is also supported by the fact that close veterinary control was prescribed in the capitals as well.

It was still quite significant that the clear connection between droves and cattle plague was indicated. It seems that the administrative reforms of the beginning of the century led to important changes not only in the place of epizootics within the administrative structure, but also in the description of them. The reform of the police might have led to stronger intrusion on the movement of herds, which, in turn, could have been reflected in traders complaining. As a reaction to that, the new regulations emphasized clearly that local authorities should abstain from any significant activities when it comes to cattle trade.

The next decades witnessed a number of new regulations and conflicts concerning droves. From 1812 to 1815 the Ministry of Police issued orders annually to local authorities reminding them that the interests of cattle traders should be protected. In 1816 such a reminder was issued on behalf of His Imperial Majesty.[81] This indicates that complaints from the traders knocked in the doors of top authorities quite persistently. In 1814 the position of the functionaries responsible for the control of droves was abandoned and all their responsibilities were entrusted on the police.[82]

A significant discussion occurred in 1818-1819.[83] Cattle traders met the Saint Petersburg war genera-governor and conveyed to him a number of complaints and propositions. Among other things, they pointed out that local authorities were halting the movement of herds for a too long time and asked to keep the control over epizootics by themselves, bearing in mind that they would follow preventive measures. The general-governor recognized of course the importance of the case as it was related directly to prices of meat. He submitted the complaints to the Emperor who, in turn, ordered the Ministry of Police to report his opinion on

[81] PSZ, I, vol.33, no. 26.298 (5 June 1816), 375-6.
[82] PSZ, I, vol.32, no. 25.739 (30 November 1814), 1092.
[83] PSZ, I, vol.36, no. 27.667 (4 February 1819), 52-60.

this case to the Committee of Ministers. The Ministry of Police collected an array of information, including decrees dating back to the eighteenth century. The Ministry also requested reports from local governors, who, unsurprisingly, responded that there were no substantial violations and that prices could be fluctuating because of economic reasons.

The final resolution was that cattle traders should specify particular cases when their legally protected interests were breached. Concerning the issue of epizootics, it was recognized that the traders were by no means restricted in their treatment of cattle, but official control could not be withdrawn. As the traders mentioned themselves, they were also supposed to follow preventive procedures, especially to bury corpses—unlike in the law from 1804, this time this measure was mentioned. The interests of cattle traders were still the central issue—partially the heritage of the previous century, since which the economic reasoning of the authorities has not changed—and the place of the issue of epizootics of cattle plague beyond livestock trade was not clearly stated. The complaints still continued. In 1844, for example, the Minister of Internal Affairs sent officials to all livestock routes to establish specific violations.[84]

2.1.2. Defining Cattle Plague as a Separate Disease

The first half of the nineteenth century was marked by important changes in the ways in which the problem of epizootics was considered administratively, legislatively and scientifically. However, important continuities with the previous times could be observed as well. New administrative reforms, most importantly the establishment of ministries, led even to deeper administrative localization of epizootics. Medical boards became subordinated to the governors of provinces who were to control their activities and send annual reports to the

[84] *Nikolai Varadinov*. Istoriia Ministerstva vnutrennikh del. part 3, book 3 (Saint Petersburg, 1862), 138-9.

Medical Department of the Ministry of Internal Affairs. Direct contact of the medical boards with the center was possible only on the matters concerning medical knowledge. Nevertheless, a stable system of the production of bureaucratic information concerning epizootics had been established.

The persistent collection of reports from medical boards allowed the Ministry of Internal Affairs to construct a generalized situation with epizootics in the Russian empire. Such a summary was shaped by both the received information and the central interpretation of it. Initially, reports did not distinguish between different diseases and mingled together epizootics of horses and cattle. However, as early as 1806 anthrax was mentioned as a distinct phenomenon which spread was related, at first, to Siberia.[85] Already in 1807 anthrax was found in Saint Petersburg and Novgorod provinces.[86] The fact that anthrax was identified as a separate disease and its ability to infect both people and animals was the reason why epizootics of this disease came to be regarded as the most dangerous ones. In 1814 the authorities registered epizootics in almost all provinces. Importantly, in Perm province cattle plague was identified as a particular disease.

Disturbed by the perceived increase in the outbreaks of epizootics, the Ministry of Police issued instructions on how to prevent them and keep cattle safe. The document was published in an official newspaper titled *Severnaia pochta* (Northern Mail).[87] It was a rather unusual publication given that the periodical was rarely concerned with anything apart from the deeds of the imperial family and top-ranking bureaucrats. The newspaper informed readers that given that animal diseases and even epizootics appear in some areas, the instructions might help landlords and other cattle owners to deal with them. Quite tellingly, neither the negative nor positive role of authorities was mentioned—it was assumed that subjects should rely on

[85] Ibid., del. part 1 (Saint Petersburg, 1858), 171.
[86] Ibid., 202.
[87] *Severnaya pochta*, №90, 11 November, 1814.

themselves solely. The recommendations, thus, provided advise, not rules. Like in the eighteenth century, the document did not distinguish between separate diseases and suggested instead single measures against epizootics in general.

The content of instructions, however, point to some changes in comparison to earlier writings regarding epizootics. Most significantly, the document extensively described the methods of disinfection which were conspicuously absent in previous times. According to it, any objects that came in contact with sick cattle could carry infection and therefore should be destroyed or disinfected. Unlike in the eighteenth century, such an approach implied that diseases could be transmitted through some physical matter. However, the old understanding that diseases spread through bad odors was not fully abandoned as various procedures aimed at suppressing harmful smells were also suggested.

In the second half of the 1810s cattle plague was persistently identified by its name. In 1821 it was recognized that cattle plague was the major cause of epizootics during that year. From Tomsk province it was even reported, erroneously of course, that a person died because of cattle plague.[88] In the 1820s epizootics were registered in dozens of provinces annually and anthrax and cattle plague were recognized as undoubtedly the most devastating among animal diseases. The former was still viewed as not necessarily less dangerous than the latter. In 1827, for example, the emperor promised 3,000 rubles for the best writing about anthrax.[89] Cattle plague, however, gradually acquired the status of the most devastating animal disease.

As the awareness that the scale of epizootics of cattle plague was far from insignificant became more acute at the end of the 1820s, the Medical Council of the Ministry of Internal Affairs published and sent to all provinces "Short Observations on Cattle Plague".[90] This text was the first consistent official explanation and interpretation of cattle plague.

[88] *Varadinov Nikolai*. Istoriia Ministerstva vnutrennikh del. part 2. book 2. (Saint Petersburg, 1862), 148.
[89] Ibid., part 3. book 1. (Saint Petersburg, 1862), 166.
[90] *Kratkie zamechaniia o chume rogatogo skota, izdannye Meditsinskim sovetom*. *1829* (Saint Petersburg), 1830.

However, despite being circulated among local authorities, it did not have legislative force. The Medical Council was mostly a consultative body regarding issues related to medical and veterinary science. While it presented a detailed description of what should be done by local authorities, it was not incorporated into any strictly official system.

Unlike in laws concerning fight of epizootics which were actually issued, "Short Observations" did not specify how exactly certain measures should fit within local administrative structures. Thus, on the one hand, the government was reluctant to change the responsibilities of local authorities by fully accepting new regulations suggested by the official central body. On the other, symbolical meaning of medical/veterinarian discourse was not significant enough to connote the state`s or even veterinarians` power. The implication was that the issue of cattle plague could have been easily reconsidered from various angles without an encroachment on official discourse.

The "Short Observations" recognized the highly contagious nature of cattle plague. Nor could such factors as climate, time of a year, weather, an age, sex, the constitution and breed of cattle, the level of care and the availability of fodder inhibit the development of the disease after it affected a beast. Unlike other animal diseases which reportedly originate from animals` exhaustion, the scarcity of fodder, rotten water or unfavorable weather conditions, cattle plague originates from "one single cause, that is from a particular contagion (contagium)".[91] By noting where cattle plague emerges from in the first place, it suggests that in northern provinces the disease could not arise by itself, but always is brought by droves from the southern provinces. Furthermore, it mentions that the infection could emerge spontaneously within the herds on their move to the north as such livestock is constantly exposed to various hardships. Thus, according to such reasoning, the emergence of cattle plague within bodies of livestock which cattle traders were moving to the capitals is caused by the same unfavorable

[91] Ibid., 1.

factors as in the case of other animal diseases, that is by the physical exhaustion. Explanation of the ways of the transmission of cattle plague from one beast to another did not differ much from those described in the above discussed recommendations issued in 1814 for animal diseases in general—cattle plague could be spread through physical objects as well through air, especially in cowsheds.

The important novelty of this document, however, lies in the fact that it explicitly recognized for the first time that the main cause of the outbreaks of cattle plague were droves heading towards the capitals. It was them spreading the infection along the livestock routes which affected local cattle. Expectedly, the "Short Observations" suggested police measures aimed at the prevention or elimination of epizootics. They are, however, extraordinarily meticulous in comparison to the previous writings in the Russian empire, providing a detailed description of the procedures of isolation, disinfection and of the establishment of quarantines. The document suggests that herds should be allowed to move towards the north only after being inspected. If a sick animal was identified, it should be separated and isolated, even against the will of cattle traders. However, contrary to that, the next sentence claimed that if cattle traders refused to leave sick beasts behind their herds then animals should be killed and buried. Due to semi-official character of the "Short Observations" and the tendency of authorities to recognize the importance of cattle traders`, the document implied that the order of local authorities could be not quite obeyed.

The "Short Observations" are extraordinary for yet another reason. It suggests that if the outbreak of cattle plague unfolded despite all the preventive measures, then the best thing to do is to kill and bury all sick and suspected beasts and pay some compensation to owners.[92] Such an idea was clearly borrowed from European sources, as it was known and practiced there since the beginning of the eighteenth century. It became one of the main measures introduced

[92] Ibid., 29-30.

on the large scale in the Russian empire in the second half of the nineteenth century. Its mentioning in the 1830s by the Medical Council remained, however, unnoticed as the "Short Observations" did not become a part of the legislation or focused policies aimed at the eradication of the disease.

During the 1830s the annual reports of the Medical Department to the Minister of Internal Affairs spoke mostly of devastating epizootics throughout the empire. While in some years epizootics were allegedly "quite insignificant", such language most probably poorly grasp actual numbers and scope as statistics and information were collected and summarized without consistency.[93] Rather, evidence suggests that epizootics were considered to be a mundane problem, which did not require much intervention. In 1838 a dozen of governors blamed the outbreaks of epizootics of cattle plague in their provinces on droves. The response of the Ministry of Internal Affairs was nothing else but the suggestion that existing rules of the inspection of herds should be followed more strictly.

While the causes of cattle plague varied within the reports of local authorities—bad weather, physical exhaustion, unfavorable environment and bad fodder—the disease became increasingly related to cattle trade in their eyes. Such awareness could have been easily backed by quite simple attentiveness of police, physicians and veterinarians as epizootics usually started from, and were the most intensive in, areas adjacent to livestock routes, especially right after droves have passed them. Despite the emergence of such more or less accurate observations, the matter of the epizootics of cattle plague was still far from clear and, as will be shown later, an array of explanations and solutions was suggested by various actors.

[93] *Varadinov Nikolai*. Istoriia Ministerstva vnutrennikh del. part 3. book 2. (Saint Petersburg, 1862), 335.

2.1.3. Educating Veterinarians

The first half of the century was time of the emergence and gradual development of veterinarian medicine and education. While veterinarians` knowledge had quite a limited impact on the strategies of the state towards cattle plague, it gradually contributed to far-reaching changes, not necessarily intended by the state. Veterinarian institutions in the Russian empire were established several decades later than in many European states. In 1803 Alexander I approved the proposal of the Minister of Internal Affairs to establish veterinarian (*skotovrachebnye*) specialized schools in Saint Petersburg, Moscow and Lubny.[94] The first was supposed to prepare professors in veterinary medicine, veterinarians, horseleeches and farriers. The second and the third—only veterinarians and horseleeches and farriers. The main purpose of these institutions was, however, intended to prepare specialists who would be valuable for the cavalry. This idea was materialized in 1808. Initially planned as separate schools, they were included into Medical-Surgery Academy in Saint Petersburg and its branch in Moscow. The plan to open the Lubny school was abandoned.

In 1803 six persons were sent abroad to study veterinary medicine so that they could fill the positions of teachers. When they returned back in 1807 they were the first specialists in veterinary medicine in the Russian empire. Whereas the medical knowledge was already reproduced through the activities of the natives of the Russian empire mainly at the beginning of the nineteenth century, veterinary skills just started to be transferred from Europe. Veterinary medicine, however, quite quickly began to develop on its own, with little influence of foreigners or foreign institutions. In a sharp contrast with medicine, few foreign veterinarians were initially invited to fill the positions related to veterinary medicine. This was due to the

[94] Nikolai Ponomarev. *Istoricheskii obzor pravitel'stvennykh meropriiatii k razvitiiu sel'skogo khoziaistva v Rossii ot nachala gosudarstva do nastoiashchego vremeni* (Saint Petersburg, 1888), 171-172.

diminishment of the practice of importing foreign specialists in general and the time which should have been sacrificed if non-Russian speaking teachers were to be invited.

Study began in 1808. The conditions of the building of Saint Petersburg veterinary school and veterinary equipment were quite miserable. There was also a shortage of students as most of them preferred medical to veterinary medicine. Nevertheless, the school started to produce a stable flow of graduates. The students were divided into two categories, which determined the type of qualification they were to obtain: either senior veterinarian physician or veterinarian physician. The students of the second category could have been admitted in the school without prior education, on the condition that they were literate. This resulted in a quite low level of the education of veterinarian physicians. The situation was worsened even more by the fact that they would often gain the senior status only after several years of service.

In 1813-1824 the school prepared 13 senior veterinarian physicians and 42 veterinarian physicians; in 1825-1838 – 34 and 27 respectively.[95] Additionally, in 1818 veterinary science was started to be taught also in Vilna University and in 1839 in Khar`kov veterinarian practical school under the jurisdiction of Khar`kov University.[96] Overall, up to 1848, the Saint Petersburg, Moscow and Vil`na institutions prepared approximately 500 veterinarians each and some lesser number graduated from the Khar`kov one.[97] The increase of veterinarians naturally led to the growth of the number of positions offered by the state. The needs of the army, of course, absorbed the majority of them. In 1859 in the Russian empire there were registered 22 masters of veterinary science, 508 veterinarians and 209 para-veterinarians. Among them, 213 served within the Ministry of War, 97 – within the Ministry of Internal Affairs and 97 – within the Ministry of State Domains.

[95] Andrei Rudenko. *Stoletie russkoi voennoi veterinarii*, 1812-1912 (Saint Petersburg, 1912), 16.
[96] Ibid., 6.
[97] Ibid., 9.

The Ministry of Internal Affairs began to involve veterinarians to fight epizootics starting from the beginning of the nineteenth century. In 1806 six foreigners were invited to deal with epizootics of anthrax in the Siberia. As the Russian empire started to produce its own specialists, positions for them began to be opened within local administration. In 1828 there were 28 veterinarians registered within the Ministry of Internal Affairs.[98] Veterinarian`s expertise became commonly related to the need to fight epizootics. In 1836 the Ministry appointed to the majority of provinces either two or one veterinarians per a province. These appointments were clearly a response to epizootics as provinces with more extensive outbreaks received two veterinarians instead of one.[99] Veterinarians, therefore, were included from then on into the standard staff of local administration. Additionally, veterinarians would be involved in ad hoc measures as well. Veterinarians from the capital-cities would be occasionally sent to regions to fight especially severe outbreaks.[100] During the unfavorable 1844 two veterinarians were sent to livestock routes to inspect trade cattle.[101]

Along with the integration of veterinarians into state service, the Ministry also began to disseminate veterinarian scientific knowledge. In 1841, for example, the Ministry sent to all medical boards a recommendation to pay an attention to the just published work on epizootics by Professor Vsevolodov, who was considered the most prominent veterinarian in the Russian empire in the first half of the nineteenth century, and to subscribe to the Journal of Veterinarian Medicine.[102] In 1843 the Ministry sent the Journal to all provinces.[103] However, as in the case of above-discussed "Short Observations", a particular package of scientific knowledge still had not been institutionalized as a part of the function of local authorities.

[98] *Varadinov Nikolai*. Istoriia Ministerstva vnutrennikh del. part 3. book 1. (Saint Petersburg, 1862), 217.
[99] Ibid., part 3. book 2. (Saint Petersburg, 1862), 234.
[100] Biograficheskii slovar' professorov i prepodavatelei Imperatorskago Moskovskago universiteta za istekaiushchee stoletie so dnia uchrezhdeniia ianvaria 12-go 1755 goda po den' stoletniago iubileia ianvaria 12-go 1855 goda, sostavlennyi trudami professorov i prepodavatelei, zanimavshikh kafedry v 1854 godu, i raspolozhennyi po azbuchnomu poriadku (Moscow, 1855), 129-131.
[101] *Varadinov Nikolai*. Istoriia Ministerstva vnutrennikh del. part 3. book 3. (Saint Petersburg, 1862), 188.
[102] Ibid., part 3. book 2. (Saint Petersburg, 1862), 649.
[103] Ibid., part 3. book 3. (Saint Petersburg, 1862), 107.

In 1845, a year after the especially devastating wave of epizootics, the government even decided to use veterinarian knowledge in order to advance its understanding of the problem it was dealing with. Three foreign veterinarians from Saxony, Denmark and Prussia and three veterinarians from the ministries of Internal Affairs, State Domains and Popular Education were sent to the Southern provinces to investigate the issue of epizootics. Among other things, the commission concluded that cattle plague was the animal disease claiming the majority of livestock losses, with anthrax in second place.[104] The work of the commission, however, failed to establish a basis for any state-led decisions.

That reflected a general disinterest of the state in taking active measures in the sphere of medicine, not to mention veterinary control. However, it is important for this thesis that that gave more free space for veterinarians and non-specialists as well to present their views on epizootics, without encroaching on the state`s stance.

2.1.4. Crafting Bureaucratic Language

If the bureaucracy of the Russian empire was not willing to rely on a homogenous explanation of the nature of cattle plague and to internalize scientific discourse, how did it frame and justify the actions of the state in a situation of recurrent epizootics? Provincial medical boards were the starting point in administrative hierarchy to write the descriptions of epizootics, which they were supposed to submit to higher authorities. Placing their own authority at the center, medical boards were predisposed to look for the source of troubles somewhere beyond their responsibilities. The state machinery was far from been represented as a coherent entity within official documentation.

[104] Nikolai Ponomarev. *Istoricheskii obzor pravitel'stvennykh meropriiatii*, 172-3.

On 24 September 1852 Kazan` Medical Board sent to the Medical Department of the Ministry of Internal Affairs a report on epizootics which took place in the province during the summer of 1852. It was based on the reports of several provincial and district veterinarians and physicians.[105] One of the causes of epizootics was identified as "the general non-compliance of medical-police measures".[106] According to a veterinarian named Ol`dskon, cattle plague first appeared in a village called Liebodka. Since in that village corpses were not buried deeply, dogs dug them out and then the infection spread out to many other settlements. The epizootic in Liebodka was devastating—192 out of 245 heads of cattle died. Ol`dskon informed police about this epizootic as, according to the report, neither him, no non medical board were informed about it. The document thus implied that the police did not really follow their duties of identifying epizootics and informing medical staff. The report also told that in another village epizootic started from the middle of June, but up to 7 July locals and village authorities did not inform higher bodies about it. Peasants from that village reportedly did not bury corpses in a proper way, and police went there to investigate such violation.

Furthermore, Ol`dskon reported that he was informed by a hundredsman (*sotskii*) of one of the villages from the district in which the two above-described epizootics occurred that some Tatars bribed a son of local herdsman to show them places where cattle dead from epizootic were buried. After receiving necessary information, they dug up corpses and removed the skins to sell them later. The report explained that such instances could be found throughout the province and concluded from that that without the enforcement of main medical-police measures there could be no success in such "an important issue."[107] It was the police, of course, who were responsible for such matters, though this was not explicitly stated in the report. Later on, in another report, the medical board noted that in a village belonging to two landlords

[105] Rossiiskii Gosudrstvennyi Istoricheskii arkhiv (RGIA), fond.1297, opis`. 131, delo.261., l. 1-8ob.
[106] RGIA, f.1297, op. 131, d.261., l. 1ob.
[107] RGIA, f.1297, op. 131, d.261., l. 2ob.

epizootic developed because initially deeply buried corpses were dug up by someone in order to remove skins. Again, it was a matter of medical-police measures as according to them skins should have been spoiled before corpses were buried.[108]

More than a year later—an astonishing delay—the governor of Kazan` province found it necessary to refute the reports of the medical board, which presented the function of police in the province in quite a negative light. The governor informed the Medical Department that police investigated the circumstance of epizootic in the aforementioned Liebodka and found that, in contrast to Ol`dskon`s reports, corpses in that village were buried deeply and they were not dug up. Even if such a statement is related to the descriptions by the medical board, the next sentence underscores a rather problematic content of the report. Whereas it argues that the investigation showed that herdsmen did not sell skins, the Ol`dskon`s report blamed Tatars instead of herdsmen. And in addition to that, in contrast to the governor`s report, this episode actually happened in a village other than Liebodka.

Moreover, the governor simply did not mention several other violations. This incompetence is interesting not so much for showing the poor performance of the police, which is hardly surprising and well-known, but rather for illuminating the hidden conflict between the medical board and police, which framed their reports by implicitly arguing against each other.

In another case, on 10 September 1858, the Bessarabian medical board sent a report to the Medical Department concerning epizootics in that province.[109] It claimed that epizootics in one of the cities occurred recurrently because there was no consistent inspection of cattle on the local market. It pointed out that town police refused to cooperate with town physician on that matter and even interfered in his work. The police justified such an attitude by claiming

[108] RGIA, f.1297, op. 131, d.261., l. 6-6ob.
[109] RGIA, f.1302, op. 1, d.4., l. 178-181.

that there was not enough staff to control all four livestock that were in the town. Nevertheless, the medical department explained that the inaction of police was the reason for the outbreaks of epizootics of cattle plague.

When describing the epizootic of cattle plague in another village, the report noticed that necessary measures were taken in time, although it is not clear what was the role of police in that. At the same time, the medical board did not fail to mention that a district physician treated sick cattle with inkstone. As the report put it, the outbreaks of epizootics in the province in general were caused not by local conditions but by the spread of infection within territories, which was possible due to the lack of enforcement of medical-police measures. Again, the police were implicitly blamed for failure to fight epizootics. While it is certainly true that proper observation of such measures could have helped to mitigate the spread of epizootics, it is important that resort to such rhetoric developed as a result of the overlap of competences of the two local authorities.

There was also another way for medical boards to designate their authority by means of criticizing others, namely, by targeting the backwardness of the local population. On 16 March 1854, Tambov medical board reported to the Medical Department that all instructions to peasants were in vain as a physician sent to some village found that sick and healthy cattle there were drinking from the same body water.[110] Peasants were also reportedly removing skins from corpses and not burying them. The report noted that the physician informed police that those corpses should be buried in order to prevent the outbreak of epizootic the following spring. Unlike in the previous cases, the medical board allied itself with the police, which affected the image of peasants.

The already analyzed report by Kazan` medical board combined the negative images of both the population and police. It claimed that one of the reasons for the spread of

[110] RGIA, f.1297, op. 133, d.63., l. 1-1ob.

epizootics was "the viciousness of commoners".[111] The official understanding of the function of local authorities presupposed that peasants should follow certain prescriptions without direct control from authorities. The implicit recognition of the limits of its own power pushed the state to pin all blame on peasants. The need to increase the awareness of subjects about regulations and proper measures was emphasized in the above-analyzed "Short Observations". Such a delegation of agency to subjects created a logic within which they could have been blamed for not observing the rules. Importantly, it was not a part of legal rhetoric as no real punishment was at stake. Thus, whereas during the eighteenth century subjects of the empire were described as backward from the perspective of enlightened knowledge, the first half of the nineteenth century saw the emergence of discourse criticizing peasants in order to delegate to them the responsibility which otherwise would reveal the ineffectiveness of certain state bodies.[112]

Such rhetoric was transferred from internal bureaucratic correspondence into published materials. In the "Short Description of Tver` Province" it was noted that cattle plague was usually brought to that province by droves moving from the south.[113] However, the cause of "infection" was not droves themselves, but "carelessness of the population and non-compliance of medical-police measures".[114] The context of conflicts between medical boards and police was, of course, not visible from such short notice and it was not clear that initially the emphasis on the importance of medical-police measures was framed as a criticism of the work of police. The mentioning of the outbreaks of epizootics in official newspapers was, of course, accompanied by standard clichés informing readers that local authorities "had taken all necessary steps."[115] Rather than adhering to authoritative explanations of cattle plague,

[111] RGIA, f.1297, op. 131, d.261., l. 1ob.
[112] For an example of such rhetoric see: Alexander, *Bubonic Plague in Early Modern Russia*, 290.
[113] *Kratkie zamechaniia o chume rogatogo skota, izdannye Meditsinskim sovetom,* 26.
[114] *Kratkoe opisanie sostoianiia Tverskoi gubernii, osnovannoe na sravnenii statisticheskikh dannykh 1783 i 1846 goda* (Tver', 1847), 16.
[115] Vladimirskie gubernskie vedomosti. Chast' offitsial'naia. no.21 May 28 (1838), 104.

authorities resorted to a self-defending discourse. This was, however, not the result of conscious policies, but rather an almost non-controlled production, circulation and interpretation of official assumptions. As will be shown below, this discourse developed further as different actors used it to enhance their stances.

2.2. Veterinarians Claim Their Expertise

There was no hierarchy of veterinarian knowledge as the state did not involve itself much into this sphere. Among other things, this means that veterinarians of the Russian empire would not have to use a kind of veterinary knowledge that was shared by many specialists to protect the authority of their profession. Their power, therefore, was backed first and foremost by positions within the state administration rather than by discourses referring to an allegedly the most advanced knowledge. This also had implications for scientific discussion. Veterinarians were more interested in addressing the state, which was the holder of the authority to favor one kinds of scientific suggestions over the others, rather than developing discussion within the profession whose representatives, unlike high-ranking bureaucrats, did not hold or were loosely connected to the administrative power. This was largely the result of the low status of medicine within the administrative sphere on different levels. The energetic attempts at the beginning by the nineteenth century of some doctors holding high administrative positions in Saint Petersburg to increase the role of medicine were blocked.[116] While physicians and veterinarians had to go through an exam in order to get a position in medical boards, medical/veterinarian knowledge was not imbued with highly authoritative meanings beyond

[116] Elena Vishlenkova, "The State of Health: Balancing Power, Resources, and Expertise and the Birth of the Medical Profession in the Russian Empire," *Ab Imperio,* no. 3 (2016): 39-75.

such professional activities and was not hierarchically systematized to the point that allegedly proper ideas would have been easily distinguishable from the questionable ones.[117]

The first half of the nineteenth century witnessed the increase of publications about cattle plague written by veterinarians. In 1838 Andrei Shtoll, a veterinarian of cuirassier division, published in the Journal of the Ministry of Internal Affairs a text of more than 50 pages devoted to cattle plague.[118] He enumerated a variety of reasons contributing to its spread. He noted that a lot of people did not know the nature of this disease and many of them behaved with indifference and negligence during its outbreaks. In addition to that, the enforcement of orders by medical authorities reportedly was meeting with some obstacles and there was a lack of assistance on the side of police and the absence of effective quarantine measures.

Shtoll basically allied himself with the most widespread version of the causes of epizootics, which was analyzed above. Notably, though unsurprisingly, unlike in the case of the population and police, he did not represent physicians and veterinarians as responsible for the problems. Like in the case of official documents, the description of epizootics was made by a functionary representing veterinary/medical authority. However, whereas in the former case medical boards were delineating their power, in the second case Shtoll, apart from supporting his position, elaborated the introductory justification of his work by engaging with a widely established practice of identifying who was to blame. He described in detail the superstitious behavior of the population and, in contrast to the earlier criticism of police, claimed that epizootics usually stop after authorities take strict measures. Between the population and state, he obviously allied with the latter, in the service of which he was employed. Shtoll, however, was allowed to describe the life in rural areas in rather negative

[117] Z.S. Gatina, E.A. Vishlenkova, "Sistema nauchnoi attestatsii v meditsine (Rossiia, pervaia polovina XIX veka)" *Vestnik Sankt-Peterburgskogo gosudarstvennogo universiteta kul'tury i iskusstv*. no.1 (2014), 168-178.
[118] "Opisanie skotskoi chumy: svoistvo zarazitel'noi materii, prichiny sushchestvovaniia i rasprostraneniia onoi, politseiskie mery i predostorozhnosti, i sredstva k pol'zovaniiu i prekrashcheniiu bolezni, s osobennym pribavleniem, " *Zhurnal Ministerstva Vnutrennikh Del* no.1 (1838), 56.

light, which suggests that the image of the Russian empire was not supposed to be unequivocally positive.

Shtoll also proposed his own explanation for the nature of cattle plague. However, while he was careful to choose sides when describing the causes of epizootics, his veterinary knowledge as such did not imply any contestation. Rather than positioning his explanation within some field of discussion, he justified his views by opposing them to the superstitions of the people. He suggested that cattle exposed to different hardships cope with the disease much easier than young animals.[119] Such observation turned upside down more common for that time explanation of the emergence of cattle plague because of the negligent treatment of livestock, which was formulated from the perspective of cattle breeding instead of veterinary science.

He also made several remarkably accurate observations about the characteristics of cattle plague. According to him, in the places which are often exposed to infection, epizootics occur more frequently, but with moderate severity. He found that hot weather kills an infection effectively, whereas frost is unable to harm it.[120] The veterinarian identified that major reasons of epizootics were cattle markets and droves and rejected all other popular explanations, which resort to bad weather, climate or god`s wrath.

Shtoll recognized that the reasons of the initial emergence of cattle plague were not known. According to him somebody believes that cattle plague emerges in the Southern region and then travels to the North, an idea vaguely suggested in "Short Observations", but doubted it on the ground that the disease probably just spread within herds as he never was able to spot the spontaneous emergence of the infection. Despite that, he rejected such assumption in the very next sentence, claiming that in his opinion cattle plague emerges by itself in the southern provinces and spread from there to the North.[121] Such contradictions show the overall

[119] Ibid., 59-60.
[120] Ibid., 70-71.
[121] Ibid., 69-70.

insignificance for him of the issue which, otherwise, have far-reaching consequences. What was really at stake for him, was to suggest a project of medical-police measures, hoping, probably, for some career advancements.

He also compiled a notably detailed list of rules of what should be done before and after the outbreak of cattle plague. In his view, it was police that was responsible for the effective prevention of the spread of infection, while the role of physicians/veterinarians was to identify sick and healthy animals and to control the separation and treatment of sick cattle.[122] Shtoll presented a number of various medicines and methods, including his own, of the treatment of sick cattle to further designate the importance of veterinarians. Therefore, it appeared perfectly acceptable to suggest changes in the function of local authorities as long as their legitimacy remained intact. It was not the interpretation of the positions held by officials as such, but their very existence that was important for the representation of state power.

Shtoll also described his experience of fighting epizootics in one of the districts of Kiev province in 1828. He depicted a desperate image of peasants` sufferings from the losses of livestock. The situation was worsened especially by peasants` irrational behavior. Despite some empathy towards them, they were blamed for the misfortunes themselves since they never informed authorities about the outbreaks of the disease. At the end of his journey through the territory of the district, he submitted his report to local medical board and police.[123]

As Shtoll`s description suggests, it was acceptable to present quite a negative image of the rural world, with the reservation that peasants were found responsible and local authorities were legitimized. This construction, however, was not the result of top-down policies of ideological justification, but rather a consequence of local authorities` need to protect their power. It is these claims with which veterinarians were forced to negotiate in order

[122] Ibid., 76.
[123] Ibid., 105.

to appeal to the state, while veterinarian knowledge and discussion of medical-police measures were essentially beyond such contested sphere.

Shtoll was not the only one who decided to use his veterinarian expertise to attract the state`s attention. In 1842 a book titled "An Attempt of Observations on Cattle Plague with the Outline of Its Treatment" was published.[124] Its author, Mina Burkov, held the position of a senior paramedic (*starshyi lekarskii vrach*), a rather low rank, and was responsible for assisting physicians. According to Burkov, after he had been taught at the Vyatka medical board, in 1829 he was appointed as a paramedic to the town of Yelabuga in Vyatka province.[125] After working there for nine years, he was moved to Ekaterinoslav in Perm province. In his work, he presents himself as an assiduous paramedic who deeply learned the nature of various diseases and acquired public recognition for his successful treatment.[126]

Initially, Burkov had planned to write about his observations on human diseases but rejected this idea due to the restrictions imposed on him by his low position. However, the outbreak of cattle plague in Ekaterinoslav inspired him to share his observations on this disease, which he had a chance to encounter during his service in Yelabuga.[127] The fact that Burkov decided to discuss the animal disease, while being cautious of entering the sphere of medicine, is illustrative of the extent to which the field of veterinary medicine was poorly established.

Burkov probably sought to use his writings for the promotion of his position and he explicitly mentioned that he presented with humbleness his writings to the authorities. He also placed his explanations within the already discussed frame of superstitious peasants and beneficent government. His text was published by the publishing house of the Ministry of Internal Affairs, which suggests that it was examined and permitted by the Medical Council.

[124] Mina Burkov. *Opyt nabliudenii nad chumoiu rogatogo skota (pestis bovilla), s izlozheniem sposoba ee lecheniia, proizvedennyi starshim lekarskim uchenikom Minoiu Burkovym* (Sankt-Peterburg, 1842).
[125] Ibid., iii.
[126] Ibid., iii-viii.
[127] Ibid., i-ii.

The latter, thus, was not eager to protect the importance of its own publication on cattle plague, the above-analyzed "Short Observations", with some points of which Burkov actually explicitly disagreed.

While recognizing the importance of "Short Observations", especially a part about medical-police measures, Burkov disagreed with it on the points concerning the nature of the disease. Referencing "Short Observations", he repeated the idea that cattle plague is caused by the contagion and that in the northern provinces it does not emerge spontaneously.[128] However, Burkov immediately undermined this explanation by asking a provocative question of how to deal with territories which are allegedly isolated from a potential source of contamination and which are, nevertheless, suffer from epizootics. Yelabuga district was such an example according to him. Reportedly, there was no cattle or leather trade there, it was not intersected by major roads, droves did not move through its territory and, finally, it was shielded on three sides by two rivers. Building on the argument that villages allegedly separated from sources of infection still suffered from cattle plague, he concluded that cattle plague could emerge spontaneously within all possible territories, whenever livestock is exposed to unfavorable local conditions, such as climate, and other factors, such as physical exhaustion or odors emanating from corpses.

Like Shtoll, he suggested a list of medicines. Although, during the first half of the century, a conviction that medicines against cattle plague were to no avail was gradually gaining more recognition, veterinarians not infrequently suggested some remedies as a way to indicate their status. Additionally, proposed a plan of a thorough eradication of cattle plague throughout the empire, which, however, consisted of usual medical-police measures.

Burkov`s text further exemplifies the indefinite importance of veterinary knowledge. While the author expressed his loyalty to the state extensively, he found it

[128] Ibid., 2.

acceptable, among other things, to argue with the official publication over the question of the geography of the spontaneous emergence of cattle plague. The controversy of whether cattle plague was emerging exclusively within the southern provinces as such, it seems, was not of high importance for Burkov as he did not make clear-cut connections between his idea that it could emerge everywhere and measures against the disease which he suggested. Veterinary knowledge served rather a purpose of the justification of the appeal to the state than was a field defining issues essential for the strategy of measures against cattle plague.

To sum up, this section shows that veterinary discourse was not a defining element in the ways in which both the state and veterinarians discussed epizootics of cattle plague. The authorities did not attempt to base their policies regarding cattle plague on some coherent conception of how epizootics should be fought against. For sure, doctors and veterinarians claimed their high statuses, mostly to please the state.[129] However, their rhetoric neither matched the official position nor opposed it, and a variety of alternative or seemingly alternative views could have been expressed without a necessary encroachment on an already established truth, as nobody actually claimed such truth. This was the result of the disinterest of the state in defending any position laden with ideology, which automatically decreased the intensiveness of discussions.

2.3. Cattle Plague Threatens Livestock

The first half of the nineteenth century was the time when livestock breeding was recognized as an essential part of the economy of the Russian empire and its people. The perceived backward state of agriculture in the Russian empire was to be advanced through the

[129] Elena Vishlenkova, "Vypolniaia vrachebnye obiazannosti, ia postig dukh narodnyi:samosoznanie vracha kak prosvetitelia rossiiskogo gosudarstva (pervaia polovina XIX veka)," *Ab Imperio*, no. 2 (2011): 47-82.

means of the dissemination of useful scientific knowledge among the progressive part of land and cattle owners. The increase of activities and publications devoted to such purposes was due to the function of agricultural and economic societies, the most important among which were the Free Economic Society and the Moscow Agricultural Society, which published the periodicals *Notes of the Free Economic Society* and *Agriculture Gazette*.[130] Given the dreadful impact of epizootics of cattle plague on livestock husbandry of some of landlords, this disease soon became recognized as one of the most essential problems, without the solution of which this part of agriculture would never possibly strive.

Different periodicals created a space of communication on the topics of the nature of cattle plague and measures against it. While they served the purpose of the dissemination of veterinary knowledge, the periodicals were concerned more with sharing alternative types of knowledge, emphasizing relations between the disease and the peculiarities of farming methods. Grievances and successes were often conveyed in the form of personal stories, which were presented to the broader community to judge. Such participation in a real or, sometimes, imagined communication enhanced personal experiences of facing cattle plague and local identities related to the perceptions of it. These beliefs of skilled landlords often conflicted, however, with veterinary science, irrespective of how heterogenous it was itself. Although the societies backed their endeavors by referring to the scientific knowledge, the issue of cattle plague was hardly presented in a systematic way. Nevertheless, they were successful in facilitating an array of opinions, all of which agreed upon the fact that cattle plague was the worst nightmare of cattle owners.

In 1839 *Agriculture Gazette* published a description of the methods of the treatment of cattle plague with the help of cold water described by a Hungarian landlord, who allegedly

[130] For agricultural societies in the first half of the nineteenth century see: Joseph Bradley, *Voluntary Associations in Tsarist Russia: Science, Patriotism, and Civil Society* (Cambridge, Mass.: Harvard University Press, 2009), 38-85.

used it successfully for six years.[131] The method was that sick cattle were to be washed meticulously with cold water and enema was to be carried out as well. It was suggested that landlords and cattle owners check to see if these recommendations were helpful. The newspaper, keen on following the precision of experiments, emphasized that the simpler methods appear at the first glance, the more attention should be paid to their proper implementation. It also connected this short article with the agricultural community of the Russian empire, noting that several similar methods proposed by landlords were already published earlier in the newspaper.

Later that year, the newspaper published a response of a landlord named Sumarkov.[132] He wrote that the information about the method with cold water inspired him to share his own one, which was used with for 40 years by his father and for 30 years by him. The method was to remove skin from the first beast which perished as a result of cattle plague, spread it with salt and force healthy cattle to lick it. Such a method, of course, would only spread the infection within a herd immediately. If it was indeed applied by Sumarkov, apparently, he ascribed cattle plague to some other disease from which the first animal died. Sumarkov recognized that his suggestion might indeed look as harmful, but, he alleged, it always worked.

In 1840 a landlord from Kaluga province informed the newspaper happily that he successfully implemented the above-described method with water.[133] After the outbreak of cattle plague all around his estate, he ordered serfs to bathe his livestock in a river several times per day. He also fumigated cowsheds with pitch smoke and tarred animal`s noses and hooves. The latter methods were often recommended since the eighteenth century, which suggests that, apart from self-invented measures, top-down prescriptions circulated among cattle owners as

[131] Zemledel'cheskaia gazeta no.30 April 14 (1839), 234-5.
[132] Ibid., no.52 June 30 (1839), 415.
[133] Ibid., no.6 January 19 (1840), 46.

well. His neighbor, though, gave his livestock boiled ants and allegedly saved half of his herd, after the other half had already perished. Thus, the mediation of periodicals allowed landlords to rethink proudly orally transmitted knowledge and private agricultural practices, and also to contribute to the bulk of published information, motivating their peers to try out new measures.

Apart from a knowledge regarding livestock breeding which encompassed various provinces of the Russian empire. The first half of the century witnessed also the emergence of a wide spectrum of the representations of regional differences within the empire. The state, however, was not concerned with creating a homogeneous image of the whole space of the Russian empire. The illustration of that is the fact that the descriptions of different regions of the empire varied considerably in regard to what they paid the most attention and to the emphasizes they made. The differences in the descriptions of provinces resulted not only from the peculiarities of each region, but more importantly from the ways in which they were described. The image of regions of the Russian empire was not necessarily framed as the narrative in which the state performs effective administration. Rather, there was a room for depictions with both negative and positive connotations, with the role of the state barely mentioned. An information collected by locally based functionaries was to be often accepted in its original form without hesitation. Apart from that, there were also competing views among top officials over the approach to statistical representations of the empire. The discussion, however, did not reach the status of high significance.[134] This evidences a further disparity between the officially sanctioned representations of the empire and the legitimacy of the state rule as such.

In the context outlined above, the construction of the image of the southern provinces as a territory with unique characteristics of cattle breeding developed in the first half

[134] Susan Smith-Peter, "Defining the Russian People: Konstantin Arsen'ev and Russian Statistics Before 1861," *History of Science* 45, no. 1 (March 2007): 47-64.

of the century. The provinces under consideration here are: Poltava, Khar`kov, Kiev, Chernigov, Ekaterinoslav, Kherson, Volyn` and Tavrida. The overlap of such factors as peculiar forms of trade, breeds of cattle, steppe geographical zone played role in the separation of this region into a particular space.[135] In addition to that, there was a group of Little Russian (Ukrainian) landlords, living mostly in Poltava, Kiev, Chernigov and Khar`kov provinces, who were willing to facilitate their local, however still all-imperial, identities by reflecting on their agricultural experiences. The significance of the aforementioned factors varied within different provinces. But they, nevertheless, were part of a single, even if vague, mental map of the southern provinces.

On the territory encompassed by all of the above-mentioned provinces, unlike in the rest of the Russian empire, the dominant cattle breed was the so-called Steppe breed, known also as Ukrainian, Little Russian, Valach, Cherkass or Grey. The animals of this breed were known as the most productive, strong and hardy, capable of carrying out heavy carts on long distances.[136] In addition to that, their meat was quite delicious. Even though many authors complained that the pureness of Steppe Cattle was unfortunately lost as the grey wool of the majority of animals was spoiled by other colors, it was unequivocally recognized as the distinct feature of the livestock breeding of the Southern region of the empire. The methods of farming were additionally shaped by the steppe zone, which covered Ekaterinoslav, Kherson, Tavrida and the south of Poltava provinces. Local cattle owners were allegedly specific in terms of techniques related to fodder, pastures and attitude towards livestock in general.

The above mentioned provinces were also the cradle of the so-called *chumachestvo*, a local trade in the direction of Black and Azov Sea. The traders, known as *chumaky*, traveled

[135] On the environmental dimension of the representations of the Russian steppe see: David Moon, *The Plough That Broke the Steppes : Agriculture and Environment on Russia's Grasslands, 1700-1914* (Oxford: Oxford University Press, 2013).
[136] "Rabochii skot" in *Entsiklopedicheskii slovar' Brokgauza i Efrona* vol. 26 (Saint Petersburg, 1899), 29.

to the coasts carrying agricultural goods on the dozens of carts driven by oxen, returning back with an abundance of salt, fish and wine. Like the droves for the Russian empire in general, *chumaky* were the main factor of the spread of cattle plague in Kherson, Poltava, Tavrida and Katerinoslav provinces.

The emerging local identities of nobles and other groups were based to a large extent on such overlap of the breed, geography, climate and local economy. It became widely held that livestock breeding was developing under highly specific circumstances in the territories named in different contexts as the southern region, the steppe region, Little Russia (Poltava, Kiev, Chernigov, Khar`kov provinces) or New Russia (Kherson, Tavrida and Katerinoslav provinces). For sure, there were specific dynamics of epizootics of cattle plague in these territories. The point, however, is that the issue of the function of the disease as such was secondary to the attention to progress in livestock breeding and its local peculiarities.

In 1846 a landlord named Phoma Zlotnitskii from Zolotonosha district in Poltava province published in *Agriculture Gazette* a long article devoted to the problem of epizootics in Little Russia.[137] According to Zlotnitskii, this topic, despite the urgent significance, was poorly problematized in published materials. He drew the public`s attention to the paradox that the newspaper published extensively on progressive methods of livestock breeding, while failing to instruct how to fight the worst enemy of cattle owners – cattle plague.

To be persuasive, he decided to illustrate the vital importance of epizootics by stories he witnessed himself. His neighbor, a landlord possessing 70 serfs, lost all his livestock because of cattle plague and was forced to borrow money to buy a new herd. Things, however, did not improve. The neighbor was not able to pay all checks and soon died, leaving his widow and children in need.

[137] Zemledel'cheskaia gazeta no.38 May 10 (1846), 312-316.

The second story was about a Cossack named Preimak, who lived in the same village as Zlotnitskii.[138] Having six pairs of oxen, he was quite a wealthy peasant. Preimak himself travelled to Crimea and Don as *chumak*, while his sons worked the land at home. The outbreak of cattle plague claimed more than half of the livestock in the village and all the cattle of Preimak. Such devastation stopped the family`s trade and agricultural activities and Preimak decided to sell part of his land to pay taxes and feed his family. He started to drink excessively, and his sons were forced to travel to Don as seasonal workers. Thus, in an instant, a wealthy family was turned into a poor one because of cattle plague. In addition, the author of the article, together with his serfs, suffered himself the loss of all livestock four times in 20 years due to the same reason.[139]

These stories were dramatic not only for their personal dimension, but also because they embody the fate of Little Russia in general. Zlotnitskii argued that the epizootics of cattle plague were the main causes of tax arrears in this region. According to him, cattle plague was harmful for the development of progressive methods of cattle breeding in Little Russia to a greater extent than in other regions because Little Russia`s vast steppes covered by abundant pastures could not be used to their full potential.[140] To illustrate this, he told the story about another neighbor, who had 80 great heads of cattle of Holland and Switzerland breeds, all of which, of course, died because of cattle plague.[141]

Zlotnitskii complained that everybody faced cattle plague with apathy and no active measures were taken. He saw himself during a trip to Odessa that the closer the city was, the more cattle corpses there were on the sides of roads. Moving back home from the center of trade, carts were, thus, bringing infection of cattle plague to many provinces located to the

[138] The Cossacks were free peasants belonging neither to the categories of serfs no state peasants, who lived on the territories of the former Hetmanate state—Poltava and Chernigiv provinces in the nineteenth century.
[139] Ibid., 313.
[140] Ibid. 314.
[141] Landlords usually bought livestock from abroad for its high milk yields.

north of the steppe. The reason of the spread of epizootics was, therefore, clear for him. It was due to droves and *chumaks*. He rejected all theories that cattle plague was emerging spontaneously due to climatic causes. Instead, he observed that cattle plague was beginning first in those areas to which *chumaks* returned from New Russia.[142] Thus, according to him, the initial emergence of cattle plague probably occurs in the southern region.

Having identified the logic of epizootics, Zlotnitski also hoped to suggest some solutions. He presented himself as the proponent of energetic measures which brought together the efforts of local community. He and other local landlords informed the inhabitants of his village trough village authorities that they should avoid any contacts with livestock from other settlements. The need to provide carts for the army, however, disrupted such isolation and devastating epizootic still reached the village.[143]

Zlotnitski, however, had other suggestions in mind. He gave an example of his quite inventive brother. Initially, the brother`s strategy was to sell all livestock for all available prices as soon as rumors were pointing to the approaching of cattle plague, just in order to buy cattle again after the danger was gone. The price differences made him think of another technique. The new idea was to establish as strict quarantine around his village as possible. He not only restricted the movement of cattle, but also prohibited his serfs to go to neighboring settlements. Apart from that, the brother often bathed his livestock in river, just as the newspaper recommended several years ago.[144]

Zlotnitski was convinced that the method of isolation was the most effective and wrote that he used it successfully himself. He also informed readers that he resorted to numerous medicines but recognized that it was a common knowledge and effective treatment of cattle plague simply did not exist. Thus, although Zlotnitski`s thoughts and endeavors

[142] Ibid, 315.
[143] Ibid., 316.
[144] Ibid.

eventually led him to conclude that police measures were the most effective ones, an opinion shared by the state and the majority of veterinarians, he presented his story as the result of collective efforts of the community of Little Russian landlords, who fought against the misfortune alone, expecting help from nowhere.

Zlotnitski, however, was indeed a figure hardly isolated from a community. Even if he devoted more time to reading periodicals than the average landlord, he undoubtedly had an extensive circle of acquaintances among his neighbors and relatives with whom he was willing to share his grievances and hopes. There was, thus, not simply an imagined Little Russia, but also Little Russian community, actually active in its own way.

Similarly to the veterinarians described above, Zlotnitski was not reluctant to reflect on how the Russian empire should be governed in relation to cattle plague. Unlike in the case of the former, his position regarding the role of the state and different groups, however, was not to identify positive and negative heroes. It was rather a surprisingly inclusive vision of the function the Russian empire and its people, vacillating naturally between local and all-imperial identities and between the appreciation of different social groups. It is true that Zlotnitski framed the issue of cattle plague within a set of beliefs established under circumstances not related to epizootics as such. In other words, his article provides a fruitful ground for the study of local identities. However, the topic of cattle breeding was especially suitable for those identities to be expressed and reinforced. According to him, cattle plague should be eradicated in order to ensure the wealth of livestock breeding, an indispensable part of the economy. Livestock breeding was what united all people inhabiting the Russian empire: "Second to arable farming, livestock husbandry is necessary for aristocrats, petty landlords, bureaucrats, merchants, city dwellers, artisans, soldiers, peasants and beggars."[145]

[145] Ibid., no. 39 May 14 (1846), 322.

Thus, writing on livestock breeding and cattle plague, Zlotnitski imagined unity through a hierarchy of subjects and state servants. At the same time, while encompassing the whole empire in his writing, Zlotnitski also reinforced his local identity. In his view, Little Russia was significantly unique in regard to livestock breeding. Unlike in the Great Russian provinces, he asserted, horses were not used in Little Russia to work the land, allegedly, because of specific characteristics of the local soil.[146] Accordingly, Little Russian sufferings from epizootics were incomparable with those of other regions.

In addition to local circumstances, Zlotnitski envisioned a way of general eradication of cattle plague. He placed his main expectations on agricultural societies and landlords, which, according to him, should work collectively on the gathering of useful information. Such a position is hardly surprising in the view of his generally positive evaluation of the role of the society in the Russian empire. However, it did not lead to the reduction of state`s role. On the contrary—collected knowledge should have helped the state to implement more grounded police measures. The progressive part of the society, therefore, was considered as a servant of the state. [147]

Moreover, due to a multilayered character of Zlotnitski`s identity, the alliance between the state and the society did not presuppose the depiction of peasants in terms of backwardness, as it was in the view of officials and veterinarians or physicians. For Zlotnitski, they were rather a part of the paternalistic imperial family and innocent victims of the disease, which was incomprehensible for the people of a simplistic nature. [148] Thus, rather than reproducing the language developed as a part of the function of bureaucracy, Zlotnitski authored more multidimensional representation of cattle plague. He was, however, a part of a

[146] Ibid. 325.
[147] Ibid., 323.
[148] Ibid. 322-3.

broader tendency, reflecting perspectives rooted, among other things, in a locality and its perceived relations to livestock breeding.

Like in the case of Little Russia, representations of special relations between a region, livestock breeding and cattle plague proliferated in New Russian as well. For example, in 1846, one Ieksh, probably a landlord, presented an article titled "The Observations on Cattle Plague in Our Steppes".[149] It was published in a journal of the Imperial Society of Agriculture in the Southern Russia, which functioned since 1828 and was based in Odessa.[150] Ieksh describes himself as being familiar with the steppe area for 15 years. Living in the area which, as was shown above, was often seen as the birthplace of cattle plague, he has observed the alleged spontaneous emergence of cattle plague himself. He located the fatal place, quite concretely, near salt lakes, namely Crimean ones and Lake Elton, which is located north of the Caspian Sea. These lakes were used for the extraction of the salt, traded by *chumaky*.

According to Ieksh, cattle plague emerged due to a lack of good forage and water demanded by cattle involved in the salt trade. Animals had to eat dry grass and spoiled hay and to drink from paddles or small ponds. Also, *chumaky* allowed cattle to drink extremely cold water from wells, despite the fact that animals were exposed to the difficulties of their work and to hot weather during a day.[151] Like Zlotnitski, Ieksh approached cattle plague from the perspective of local conditions of livestock breeding, putting more emphasis, though, on the local harmful practices related to livestock breeding, rather than on the ways of the spread of the disease. He suggested a number of remedies, some of which were suggested by his acquaintances, who were a part of a community sharing the conditions of steppe livestock breeding.

[149] F. Ieksh, "Nabliudeniia za chumoiu rogatogo skota v nashykh stepiakh," in *Sbornik statei o sel'skom khoziaistve Iuga Rossii, izvlechennykh iz Zapisok Obshchestva sel'skogo khoziaistva Iuzhnoi Rossii s 1830 po 1868 god*, ed. I. Palimpsestovy (Odessa, 1868), 548-553.
[150] Unlike in the case of Moscow Agricultural Society and Free Economic Society, Imperial Society of Agriculture in the Southern Russia awaits to be studied.
[151] Ibid., 548-549.

To sum up, the emergence of discourse playing with locality, livestock breeding, the empire and cattle plague was not the result of the intentional actions of the state, which, in fact, was not even interested in promoting any narratives related to cattle. Nevertheless, such language was devotedly loyal to the empire and, therefore, in a sense, broadened and reinforced the representation of the Russian empire. The possibility of outright criticism of the state and its official representatives was, of course, excluded. However, under the general umbrella of loyalty, often implicit, the limits of representations were confined, to a large extent, by imagination and focus of discussions, which were of little interest to the state. At the same time, the variety of the descriptions of the function of the empire and lives of its subjects hardly influenced the operation of official bodies. In a sphere of relations between the state and information, such heterogeneity, nevertheless, outlined alternative avenues to follow in the future.

2.4. The State Decides to Discuss the Measures

The state began to consider more active intervention into the problem of cattle plague starting from the middle of the nineteenth century. This was connected to attempts at reforming state peasants which unfolded during the 1840s and were famously orchestrated by the head of the Ministry of State Domains Pavel Kiselyov. The Ministry took an active part in distinguishing cattle plague as especially a dreadful disease.[152] In 1847, 1848 and 1849 it invited three foreign veterinarians to visit different regions of the Russian empire in order to investigate local cattle breeding and to suggest reasons for the origins of cattle plague and potential measures against it.[153]

[152] Nikolai Ponomarev. *Istoricheskii obzor pravitel'stvennykh meropriiatii k razvitiiu sel'skogo khoziaistva v Rossii ot nachala gosudarstva do nastoiashchego vremeni* (Saint Petersburg, 1888), 173.
[153] RGIA, f.1297, op. 131, d.167., l. 1.

These efforts, however, were given meaning only in 1852, when was established the Commission aimed at "the search for the means of the eradication of cattle plague affecting livestock in the possession of state peasants".[154] Unlike in the case of the aforementioned commission established in 1845, this time cattle plague was the single problem to be addressed. Apart from the development of the understanding of the issue of epizootics within officially collected information, the rise of publications on cattle plague should have also directed the attention of officials towards it, even if it did not contribute to the change in policies directly.

The Commission consisted of three members, among whom were the Main Physician of the Ministry of State Domains Bukovskiy, the member of Academic Committee of the same ministry Bul`mering and the member of Medical Council of the Ministry of Internal Affairs Rosenbeerg.[155] In 1854 the Commission met to discuss information at their disposal. The members had read: 1) surveys by veterinarians subordinated to the Ministry of State Domains who were mandated with the task of investigating circumstances regarding cattle plague in several provinces; 2) annually reports of veterinarians working at the Departments of State Domains and state farms; and 3) opinions of foreign veterinarians invited from several European countries to study the origins of cattle plague, causes of its spread and remedies for it. All the authors of these documents were asked to answer several questions: 1) whether on the whole territory of the empire cattle plague could emerge spontaneously or only on some separate territories, and whether this could happen within the bodies of all breeds of cattle or only some particular ones; 2) what the places of the spontaneous emergence (if such exist) were; 3) what the ways of the spreading of cattle plague were.[156]

These questions show that the Commission framed its understanding of cattle plague around the controversy of connections between Steppe Cattle, the steppe region and the

[154] Ibid.
[155] *Otchet o pervykh opytakh privivaniia chumy rogatomu skotu, proizvedennykh po Vysochaishemu poveleniiu v Novorossiiskom krae* (Saint Petersburg, 1854), 1-2.
[156] RGIA, f.1297, op. 131, d.167., l. 2.

spontaneous emergence of the disease. Evidently, any measures should have rested on the correct understanding of this issue if they were to succeed. Even though the idea that cattle plague originating somewhere in the southern provinces of the empire was already formulated, the Commission concentrated on the steppe as a distinctive environmental space and on Steppe Cattle as the breed having some specific relation to cattle plague. The emergence of these lines was probably facilitated by the simultaneous attention the Ministry paid to both cattle plague and livestock breeding.

The Commission looked for more definite and original views on the problem and they were to be received by the means of empirical observation of local conditions by veterinarians rather than through an examination of published literature, which reportedly provided nothing more than opposite opinions. The expertise of the veterinarians of the Russian empire was to be balanced by foreigners. Quite tellingly, the Commission simply dismissed an array of published materials, some of which, as was shown above, were based also on direct observations, and decided instead to focus on the unpublished reports of a number of specially selected veterinarians.

The reliance on direct observations, however, did not fulfill expectations. The Commission was upset by the shallowness of the submitted reports. Almost all veterinarians thought, quite expectedly, that cattle plague was emerging spontaneously on Steppe Cattle; however, none of them specified the precise territorial boundaries of this phenomenon. It was only suggested tentatively that cattle plague was emerging within the Kyrgyz steppe, some parts of Orenburg, Samara, Saratov and Astrakhan` provinces, Host Lands of Don and Black Sea, Kherson, Tavrida and Ekaterinoslav provinces and Bessarabia—in other words the steppe region.[157] The reasons for the emergence were not original neither. The influence of climate, marshy and lowland territories filled with harmful odors, still waters and salt-marshes, the lack

[157] Ibid., 2.

of fodder and clean water and the absence of rational approach to livestock breeding were listed. The sources of the spread were usual as well: herds being driven to the North; oxen which drive carts; and the trading of infected skins, wool and lard.[158]

As the veterinarians needed to propose some measures, they pointed out that the main reason of the spread of the disease was that the legislation on medical-police measures did not function and suggested that the only solution would be "the strictness of quarantine measures".[159] However, to its "bitter disappointment", the Commission, after meticulous examination of the reports, did not manage to find any of the suggestions to be satisfactory. Tellingly, the Commission rejected the reports, especially the call for more strict quarantine control, not on the ground of their ineffectiveness, but because "the majority of opinions of the investigators were based not on the actual observations, but on the borrowings from other sources and thus could not be authoritative for such important cause".[160] Foreign veterinarians were in the Russian empire for a short period of time and even did not reach the territories of the outbreaks of cattle plague and the veterinarians of the Ministry of State Domains did not present convincing materials about the boundaries and reasons of the emergence of cattle plague.[161] The frustration of the Commission was caused, however, not simply by the allegedly low quality of reports, but more by the fact that they did not suggest solutions that would fit the expectations and more importantly the scope of power of the Commission itself.

The Commission was a part of the project aimed at the elevation of the fate of state peasants rather than vested with the responsibility to resolve the problem of cattle plague on the all-encompassing scale, which would require considerable resources and powers. It was implicitly understood that the expansion of local administration would not be unfolded just for the purposes of combat against cattle plague and the Commission understandably limited the

[158] Ibid., 3.
[159] Ibid., 14 ob.
[160] Ibid. l. 15.
[161] Ibid.18.

scope of possible plans. Hence, the particular attention to the development of cattle plague on the local level, especially in the steppe region. The idea that the prevention of the spread of cattle plague in the steppe could arrest its transfer further North was nicely squared with the Commission`s awareness of the undergovernence of the Russian empire.

The Commission`s anxiety about the reports is also evident from its contradictory claims. Its own suggestion was to define precisely the places of the emergence of cattle plague and to establish quarantine borders, even though, earlier in the document, the quarantine measures were rejected as not being based on empirical studies of the steppe. Furthermore, just the next sentence argues that the establishment of quarantine borders would be difficult and almost impossible because that would complicate connections between provinces, thus questioning the previous proposition suggested by the Commission itself.[162] While the reports of veterinarians claimed that the spread of cattle plague is not contained by administrative measures, implying local authorities were to blame, the Commission claimed that "superstition and ignorance of peasants are the main reasons why they neglect the necessary measures of the prevention of epizootics".[163] Peasants reportedly did not resort to measures prescribed by legislation and authorities were able to learn about the outbreaks only when they reached a large scale. Thus, the guilt was shifted from the authorities to peasants.

However, the Commission recognized that "the lack of a close control facilitates the spread as well".[164] This note pointing to the ineffectiveness of local administrations, with still smaller share of responsibility than peasants, of course, was needed in order to introduce some changes, even though they were narrow ones. It was suggested that responsible peasants within rural communities should be asked to take necessary measures. This case shows how the thinking of bureaucrats about certain regulations was to a large extent shaped by their

[162] Ibid., 19.
[163] Ibid., l. 19.
[164] Ibid.

awareness about the undergovernence of rural areas. This knowledge was, however, implicit and was expressed instead in a form of the rhetoric of peasant`s backwardness and their negligence of official regulation. Discussions about reforms were to be balanced between novelty and changes and need to keep some parts of administration, which righteousness was justified by references to the improper behavior of peasants, intact. This allowed for contradictory claims to be embedded in the official language. That is why peasants` allegedly unreasonable behavior was compatible with the simultaneous recognition of the shortcomings of state power. In addition to that, the fact that claims about the superstitions were connected to a particular sphere of the state`s power meant that the backwardness of peasants was not necessarily self-evident in all possible contexts, which allowed some room for different renderings. While proclaiming all peasants superstitious, the Commission at the same time recognized that some of them could be reliable enough to serve as intermediaries between villages and the authorities.

The fact that the Commission was concerned with the welfare of state peasants primarily meant that it initially hoped to find effective measures which would have been possible to implement by the means of local authorities. Hence, a special attention to direct observations of epizootics in the provinces of the empire. This approach narrowed the range of materials which the Commission consulted. While resorting to the valuable opinion of the foreign veterinarians about the steppe, the Commission abstained from learning about the measures implemented in European countries. The ways of the transfer of European knowledge were, thus, highly selective. The Commission used, nevertheless, the European experience in a way that the Commission initially did not anticipate. After dismissing the reports, the Commission suggested that the most promising and convenient method would be the "artificial inoculation" of cattle plague. It was stated confidently that inoculation would actually prevent the spread of cattle plague and therefore even "justness requires to prove experimentally the

usefulness in which foreign veterinarians, who inoculated cattle plague with the success that fully fulfilled all expectations, had a chance to be assured."[165] As a justification of the method, the document then mentions a list of years and territories marked by successful experiments with inoculation. Apart from the positive example of Europe, the Commission returned to the argument that cattle plague initially emerges in the steppe and therefore inoculation of Steppe Cattle should prevent its spread elsewhere.

The inoculation of cattle plague was indeed seriously considered in many European countries in the second half of the eighteenth century, especially in the Netherlands, Denmark, Mecklenburg-Schwerin and Prussia.[166] The interest in inoculation was to a large extent inspired by successes in the inoculation of smallpox. The experiments in inoculation were sponsored by states as well as undertaken on the basis of private initiatives. The procedure was to artificially infect healthy cattle with the contaminated matter taken from sick beasts. There were several factors which could mitigate the effects of the disease and prevent artificially contaminated cattle from dying, such as the virulence and the amount of the matter and the age of cattle. The death rates of inoculated cattle varied from nearly the same as in the course of natural epizootic to not much than 10%, which was considered as quite positive and some cattle owners resorted to such solution. Nevertheless, opinions on the inoculation diverged and this measure was never implemented on the large scale, giving way to police measures and the killing of sick beasts. In the nineteenth century in Europe interest in inoculation had largely faded away, while in the Russian empire numerous experiments took place during the 1850s and 1860s.

[165] Ibid. l. 17ob.
[166] C Huygelen, "The Immunization of Cattle against Rinderpest in Eighteenth-Century Europe," *Medical History* 41, no. 2 (April 1997): 182–96.

2.5. Iessen Persuades the Commission

The mentioning of European experiments by the Commission served the purposes of the justification of inoculation rather than suggested a meticulous examination of actual researches. The idea and inspiration about inoculation, in fact, came from Peter Iessen, a veterinarian who was not a member of the Commission. As will be shown below, the Commission simply repeated Iessen`s ideas, representing them as the foundation of its own conclusion about the usefulness of inoculation.

Peter Iessen was born in 1801 in Katharinenheerd. After graduating from veterinarian institute in Denmark in 1822 he soon began to serve in the Russian empire and, after changing several positions, he was appointed as the director and professor at newly opened Dorpat veterinarian institute in 1848. Iessen, thus, was in a convenient position to advocate for the effectiveness of his measure.

While the rhetoric of European success was strongly present in the report of the Commission, a veterinarian, who in fact was a foreign specialist serving in the Russian empire, resorted to it himself in order to justify his interests in a particular method. The allegedly European knowledge was therefore embodied in the persona of Iessen rather than in the findings of the Commission, which simply used its position and official knowledge in order to imbue Iessen`s ideas with authoritative meaning. In other words, the overlap of the two interests was wrapped in the rhetoric of European efficiency.

The ideas of Iessen were presented to the Commission by one of its members, Rosenberg, the official of Medical Council of the Ministry of Internal Affairs, to which Iessen submitted his propositions. Moreover, as the Commission said, Iessen was so convinced about his plan that he also asked the Department of Agriculture of the Ministry of State Domains to

entrust him with task of conducting experiments with inoculation in the steppe during his vacation.[167]

In fact, Iessen had been trying to attract the attention of authorities to inoculation since 1830, but apparently his suggestions fell on deaf ears. The reform of state peasants, however, provided a framework for the veterinarian`s ideas to be heard. Iessen`s strive for the eradication of cattle plague throughout the whole Russian empire and his success in persuading the Commission of the trustworthiness of his plan extended the initial concern only with state peasants to the search for the problem of cattle plague on a much larger scale.

In 1853, the year before the Commission started to work, Iessen published "The Ultimate Eradication of Cattle Plague".[168] Even though the problem of cattle plague was, of course, commonly recognized as quite painful and essential for the normal development of livestock breeding, the text by Iessen is quite exceptional in its highly enthusiastic mood and confidence in the potential of the proposed solution. Whereas other works proposing measures against cattle plague did not have a specific audience and there was no definite scientific discussion about cattle plague among Russian veterinarians, Iessen hoped to promote his ideas on the basis of the purpose of the Commission. At the same time, such insistence emanated from his highly strong personal attachment to the idea of inoculation, which is evident from the narrative emphasizing biographical information and from the fact that Iessen had suggested such remedy earlier than the Commission started to work.

The main message of the text is that there is a possibility to fully eradicate cattle plague within the Russian empire and Europe by resorting to the method of inoculation. According to the work, the combat against cattle plague is the highest possible goal of veterinary medicine, which is supported by dreadful statistic. Iessen mentions that there were

[167] RGIA, f.1297, op. 131, d.167., l. 18 ob.
[168] Peter Iessen, *O Sovershennom Iztreblenii Skotskoi Chumy. Monografiia direktora derptskoi veterinarnoi shkoly* (Saint Petersburg, 1853). The text was also published in: Zemledel'cheskaia gazeta no.55 July 10 (1853), 436-9; Ibid. no.56 July 14 (1853), 447-8; Ibid., no.57 July 17 (1853), 451-4.

only three scholars who argued for the total eradication of cattle plague and all of them proposed inoculation as a way to achieve such result. One of them, Erich Viborg, was actually a teacher of Iessen and it appears that the latter was essentially promoting Viborg`s ideas in their core, rather than suggesting original proposition, although it should be mentioned that Iessen recognized his reliance on the teacher`s work.[169]

The idea was that all cattle from steppe of the Russian empire should be repeatedly inoculated until they would become fully resistant to cattle plague. As it was believed that cattle plague originally emerged only within the bodies of Steppe Cattle as they are exposed to unfavorable conditions, it was assumed that the source of the spread of the disease to other breeds of cattle in the Russian empire as well as abroad would be, thus, eliminated. It was, thus, the idea on which the Commission decided to embark a year later. The inoculation in the steppe, it was argued, would be even more effective in view of the fact that the progression of illness in Steppe Cattle was less severe than in other breeds, which meant lesser death rates.[170] This claim, in fact, was based on correct observations, as Steppe Cattle were indeed unusually resistant to the disease due to its endemic character in the steppe. Nevertheless, the general plan was based on the idea that cattle plague emerges spontaneously in the steppe, an assumption that was never questioned by Iessen. His only particular anxiety was whether inoculation would ensure long-lasting protection from cattle plague or the possibility of the second infection of the same beast was not negligible.[171]

It was important for him to argue against veterinary-police measures, which represented an alternative to inoculation. While recognizing that police measures were quite effective in other countries, they would not be so in the Russian empire because they would not prevent the spontaneous emergence in the steppe. Allegedly, as text claims, the inadequacy

[169] Peter Iessen, *O Sovershennom Iztreblenii Skotskoi Chumy. Monografiia direktora derptskoi veterinarnoi shkoly*. (Saint Petersburg, 1853), 3.
[170] Ibid., 17-19.
[171] Ibid., 15-17.

of police measures grew as cattle plague was becoming more widespread. Iessen mentions that the reports of foreign veterinarians who, as discussed above, visited the Russian empire in 1847, did not mention inoculation at all, which is not surprising given that this method was already out of fashion at that time, and insisted instead only on medical-police measures. To remedy this, he published a short article in the hope that foreigners would include information about inoculation into their reports for the Commission. They did not do so.[172]

Claiming that cattle plague emerged spontaneously within Steppe Cattle, Iessen recognized that there were veterinarians who disagreed with this. He pointed to the ideas of the aforementioned Vsevolodov who believed that cattle plague could affect equally all breeds of cattle if they are exposed to similar harsh conditions as Steppe Cattle. He also mentioned Burkov, whose work was analyzed above as well, and who, according to Iessen, was a student of Vsevolodov. Burkov reportedly gave a lecture to Saratov Nobility Assembly in which he argued that cattle plague could emerge spontaneously in all territories, independently of breed or season. As generational continuities between scholars were important for Iessen, he suggested that Burkov had simply borrowed such ideas from his teacher.[173] He rejected their works on the ground that they were based on theoretical thinking rather than on practical observations, which were an example of proper scientific research according to the Commission, (as described above, as well). The idea that cattle plague emerges in Steppe Cattle, was, however, as Iessen claims, based on his own field work as well as "historical data" collected in many regions. Apparently, he was not familiar with Burkov`s other work, discussed also in the other chapter, the arguments of which were backed by the author`s experience of serving as veterinarian in a non-steppe province rather than simply theoretical knowledge.[174]

[172] Ibid., 4.
[173] Ibid., 10.
[174] Ibid., 11.

As a starting point of his plan, Iessen proposed to establish an inoculation institute in the Sothern region which, for two years, would conduct experiments aimed at clarifying further steps and the general usefulness of the plan. He, thus, along the generally assertive tone, left some room for the possibility of the failure of the inoculation project. The experiments would contribute to the formation of a group of specialists who would then conduct inoculation on a large scale and teach cattle owners to do it without professional help. As the effectiveness of inoculation would become evident, people would seek for this method themselves.

While Iessen`s energetic personality certainly played a role in the promotion of his project, it should be recognized that the other side of the coin was that his ideas proved to be convenient for the Commission, which preferred to rely on seemingly scientific arguments which would not undermine the poor state administration. The Commission engaged veterinarians into its work unsystematically and preferred to rely on the reports of state veterinarians balanced by the opinions of few foreign specialists. The multitude of views and discussions about cattle plague was beyond the reach of the Commission. Instead, it readily accepted the proposition of Iessen, which, luckily for the members of the Commission, would not require many resources. The contacts between science and the state reached an agreement as soon as no radical changes in the governance were involved. As Iessen`s work shows, veterinarians clashed over the potential of certain measures, backed by scientific argumentation, from the perspective of their effectiveness, but the implicit consideration was also to suggest the project that would satisfy the interests of the state which was to implement them. It is telling that nobody assumed the possibility that cattle plague did not emerge spontaneously in the steppe as that would undermine the whole cause.

Iessen`s perseverance bore fruit and his long-lasting dream of large-scale experiments came true, raising stakes in fight against cattle plague to the extent hardly envisioned by officials. The state financed experiments with inoculation already in 1853.

During the summer of that year Iessen, with his fellow veterinarians conducted, an experiment near Odessa.[175] Many other specialists, institutions and landlords, however, became interested in inoculation as well. Especially active was Khar`kov veterinarian practical school. Already in 1853, veterinarians from that school performed seven experiments in Khar`kov and Kursk provinces, in some cases during the natural outbreaks of epizootics of cattle plague. A number of new experiments were conducted by both Iessen and the veterinarian school during the following years as well.

Although the results of the experiments were not unequivocal as a significant percent of animals died because of artificial infection, the initial high expectations did not decrease. In 1854, the Scientific Committee of the Ministry of State Domains published Iessen`s report on his experiments.[176] In an introductory note, the Committee designated its own view on inoculation. In a nutshell, it joined Iessen`s confidence in the possibilities of such scientific approach and even reinforced its rhetorical appeals. Such views are hardly surprising since the Ministry was known for that it brought together man with progressive ideals.[177]

The goals of the Ministry and Iessen`s ideas facilitated each other, which resulted in quite pretentious claims backed by veterinary science. Importantly, such program followed by the Ministry undermined police-medical measures, which were an institutionalized part of the administration of the empire. It explicitly argued that such measures are not in line with the requirements of the contemporary tendencies. Moreover, it expressed hope that landlords could practice inoculation on their own, thus, fueling activities and identities potentially at odds with the power of local authorities.[178]

[175] *Otchet ob opytakh privivaniia chumy rogatomu skotu proizvedennykh po rasporiazheniiu vysochaishe uchrezhdennogo komiteta ob uluchshenii veterinarnoi chasti i vzyskanii mer k prekrashchenii skotskikh padezhei v imperii* (Saint Petersburg, 1865), 15.
[176] *Otchet o pervykh opytakh privivaniia chumy rogatomu skotu, proizvedennykh po Vysochaishemu poveleniiu v Novorossiiskom krae* (Saint Petersburg, 1854).
[177] Ibid., 3.
[178] Ibid., 6-8.

Controversies concerning the power of local veterinarians might have occurred in a light of the fact that many landlords were willing to inoculate their cattle with the help of veterinarians conducting experiments in their regions. They saw such a method as a viable solution to their fears of loosing all livestock. In addition, inoculation enhanced landlords` identities concerning local conditions of livestock (as discussed in the sub-chapter 2.3.).

The most famous case of the involvement of local actors in inoculation was a project in Karlovka estate located in Poltava province, that is in Little Russia. Karlovka estate, which since the 1850s was belonged to Grand Duchess Elena Pavlovna, known for her influential position within the circles of some top-ranking officials, was one of the biggest landholdings in the Russian empire. It was famous for practicing progressive methods of farming, which began to be perceived as a model to be followed by other landlords. In fact, it was believed that only in Karlovka the bread of Steppe Cattle, the importance of which for local identities was mentioned above, preserved the pureness of its breed.[179] Significantly, the veterinarians hired by the estate were the brothers Raupach, one of whom, Maximilian, was a pupil of Iessen. The latter`s special attachments to the idea, as discussed above, of generations of scholars and their students was fulfilled. Maximilian became an ardent proponent of inoculation. As a result of his initiative, a special station for inoculation of livestock against cattle plague was established on the estate in 1857. It served the needs of both the estate itself and all other cattle traders who wanted to keep their cattle safe.

During 1857-1866, 1764 heads of cattle were inoculated in the station and only 6,5% of which died. Karlovka had traumatic experiences related to cattle plague. It was still remembered in the second half of the nineteenth century that only nine out of 600 heads of beautiful Devon cattle, which the estate bought from abroad, survived after the outbreak of

[179] "Otchet o puteshestvii po Rossii i za granitsei, s uchenoiu tsel'iu, ad"iunkta khar'kovskogo veterinarnogo uchilishcha A. Stepanova," in *Zhurnal Ministerstva narodnogo prosveshcheniia*. Issue 122. (Saint Petersburg, 1864), 215.

cattle plague in 1822.[180] Thus, the achievements of inoculation were presented as quite significant. In fact, as will be demonstrated later, the example of Karlovka will be used later by many supporters of this approach as the most figurative illustration of the perspectives of large-scale inoculation.

The increase of the popularity of inoculation paved the way for possible conflicts. For example, one of the veterinarians who performed official experiments with inoculation argued that local veterinarians perceived such a project quite negatively, since they were afraid that the eradication of cattle plague would decrease their means of living.[181] Such an observation does not seem implausible due to the quite miserable position of veterinarians. A similar resistance of veterinarians against inoculation was recorded also in Great Britain in the context of a massive outbreak of cattle plague in the 1860s.[182]

However, whereas there might have been some conflicts on a practical level, the incompatibility of administrative practices which relied on medical-police measures and the Ministry`s rhetoric of scientific development could be claimed only retrospectively and through the instrumental clash of them. There was no actual explicit discursive conflict at that time, since, as was shown above, the state did not really claim any strong veterinarian narrative concerning epizootics and, therefore, the idea regarding inoculation did not have an equivalent to be confronted with. In other words, if local veterinarians would have decided to claim the essential importance of police-medical measures, they would need themselves to raise the symbolic power of such measures, rather than to resort to the already established discourse, which, in fact, simply did not exist.

[180] *Otchet o Pervoi Vserossiiskoi vystavke rogatogo skota 1869 goda. Prilozhenie*, 25-28.
[181] Ivan Sergeev. *O chume rogatogo skota i ob iskustvennom privivanii. Razsuzhdenie na stepen' magistra veterinarnoi medetsiny* (Moscow, 1873), 109.
[182] Michael Worboys, *Spreading Germs: Disease Theories and Medical Practice in Britain, 1865-1900*, Cambridge History of Medicine (Cambridge, UK: Cambridge University Press, 2000), 64.

Such features of the described discursive field essentially excluded the possibility of conflicts that could have been framed around rhetoric appealing to the power of the state, thus, potentially questioning the legitimacy of the latter. All sides had to formulate justificatory claims based on veterinary knowledge by themselves, without been able to appeal to the preferences of the state, while, in fact, the empire backed both medical-police measures and inoculation. Importantly, this case shows the problematic nature of the notion of "state" when speaking about the production of representations and knowledge by different state bodies. The actual and symbolical power of the empire was strongly embodied in different administrative institutions and positions. However, there was much less organization on the level of the information and ideas on which different state actors relied.

But coming back to the initial project of inoculation, the Scientific Committee of the Ministry of State Domains, despite the lack of sufficient results, decided to follow the plan suggested by Iessen from the very beginning. In February 1857, the Minister of State Domains asked the Ministry of Internal Affairs to create a special committee that would coordinate a large-scale inoculation of cattle in New Russia. Such consent was given, and the commission was created that same month. It recognized that it was too early to think about the all-imperial introduction of inoculation of cattle plague but agreed that such measure could be taken within New Russia, characterized by the steppe environment, on the territory of which quarantine and prophylactic measures failed in fighting epizootics.[183]

These ideas clearly echoed Iessen`s proposal he which inspire the project in the first place. However, his idea on which the whole plan was based—that cattle plague emerges within Steppe Cattle was not mentioned. Moreover, the commission, instead of introducing inoculation in New Russia, prescribed experiments for yet another three years and on a larger

[183] *Otchet ob opytakh privivaniia chumy rogatomu skotu proizvedennykh po rasporiazheniiu vysochaishe uchrezhdennogo komiteta ob uluchshenii veterinarnoi chasti i vzyskanii mer k prekrashchenii skotskikh padezhei v imperii,* 46.

scale. Thus, there was some hesitancy concerning the match between the initial ideas and the results of experiments and observations. Nevertheless, a willingness to materialize the initial hopes was preserved. In 1860, three stations for experiments with inoculation were established in several southern provinces.[184] The new attempts did not bring, however, qualitatively new results and in 1864 the government decided to stop financing the project.

Despite their eventual failure, the role of these endeavors was quite significant in several ways. Most importantly, already in 1860, the commission created for organizing the inoculation of cattle plague in New Russia was reorganized into the committee responsible for the designation of the ways of the development of veterinary medicine in the empire in general rather than just in relation to inoculation.[185] Thus, the project on inoculation expanded beyond its initial limits and increased the importance given by the state to veterinary control. The readiness of the Ministry of State Domains to embark on a project informed by the notions of scientific progress was effectively exploited by Iessen. The result was disappointing for both of them, but it nevertheless turned out to be productive in a different way, namely the creation of a separate body devoted to veterinarian issues. Importantly, as the result of such engagement between the state and the enterprising veterinarian, the problem of epizootics became the subject of administrative changes even before the Great Reforms started to gain momentum. Of course, a broader will was needed for actions aimed at more practical results to be implemented, but that is a matter of the general openness of the government of the Russian empire to large-scale reforms, which is a topic of the next chapter.

The increase of publications on cattle plague certainly made officials more aware of it, even if they still did not influenced policies directly. The administrative procedures set quite selective filters on knowledge to be considered, not to mention the knowledge to guide

[184] Ibid., 48.
[185] Ibid., 49-50.

the policies. The relationships between knowledge and administration were highly unpredictable—bureaucrats could have relied on a bulk of information to back their vison on certain policies, which, in turn, were volatile enough for officials to abandon previously acclaimed knowledge for the sake of a new administrative shift.[186] The knowledge would acquire significance only insofar as the state was to adopt it and those who produce it would not have control over its use. In other words, it was not about the production of meaningful knowledge or control over it, but about labeling it as such. While such dynamics predisposed the state against abrupt changes, the influence of knowledge on state actions was not entirely predictable and controlled. In fact, it might have led to unintended results and the gradual internalization by the state of issues which did not necessarily fit its initial expectations. That the cooperation between the state and Iessen led to uncomfortable consequences for the former is the subject of the next chapter.

[186] Ian W. Campbell, *Knowledge and the Ends of Empire: Kazak Intermediaries and Russian Rule on the Steppe, 1731-1917* (Ithaca: Cornell University Press, 2017), 49-55.

Chapter 3. Cattle Plague in Times of Changes: Continuities Reframed

The second half of the century is usually viewed as quite unfavorable for landlords, since the abolition of serfdom challenged the economic patterns of their estates and forced them to adapt to new harsh reality.[187] However, during that period, there was also an increase in the production and circulation of knowledge and in communication regarding livestock breeding. One of the most important illustration of these tendencies are agricultural exhibitions. Such events started to take place quite frequently and covered diverse regions. Exhibitions were organized also in the first half of the nineteenth century by the Ministry of State Domains, but their participants were mostly state peasants. In total, 588 agricultural exhibitions were held throughout the empire during 1843-1887.[188] Landowners had a chance to discuss with each other various types of breeds, farming methods, best types of fodder and many other issues dear to them. The organizers evaluated animals which cattle owners brought to exhibitions from their farms. The most beautiful, strong and productive animals were awarded prizes, which set models for cattle owners to achieve.

Among other things, cattle plague was an important issue to discuss. As it was shown in the previous chapter, already in the first half of the century, cattle plague was one of the main problems addressed within the community of cattle owners through the medium of periodicals. The second half of the century, however, witnessed the emergence of much more expansive space of communication. During exhibitions, cattle owners were able to share their memories about the outbreaks of cattle plague they experienced some time ago or voice their fears about the potential future misfortunes. Some cattle owners would mention the absence of

[187] For an argument that many Russian nobles successfully survived post-emancipation changes by cleverly exploiting new economic and career opportunities see: Seymour Becker, *Nobility and Privilege in Late Imperial Russia* (DeKalb, Northern Illinois University Press, 1985).
[188] "Vystavki" in *Entsiklopedicheskii slovar' Brokgauza i Efrona* vol. 7a (Saint Petersburg, 1892), 559.

the disease in their region for a long time as a sign of a luck or progress.[189] New and inventive techniques of animal husbandry became known and were shared among cattle owners. For example, at the beginning of the 1890s, in one of the districts of Saratov province, *chumaks* and wealthy peasants started to buy camels to substitute oxen. The reasons for that were the shortage of fodder and a chance to avoid restrictions related to cattle plague regulations.[190] That was not, however, an exceptional case. In 1894, one cattle owner from Ekaterinoslav province also bought 46 camels. Reasons for that resembled the Saratov province case—to decrease the amount of fodder and to avoid losses of animals during epizootics of cattle plague.[191] In both of these cases, perhaps not by a coincidence, it was believed that one camel worked for two oxen. Most importantly for this thesis, however, is that exhibitions brought together into one room influential veterinarians and officials to discuss publicly the solutions to epizootics of cattle plague.

3.1. Debates Become Public

The atmosphere of a relative publicity and openness characteristic to the epoch of the Great Reforms allowed to discuss issues which took roots several years earlier in a new format. In 1869, the First all-Russian exhibition of livestock took place in Saint Petersburg. It was organized by the state and was supervised by Grand Duke Nicholas Nikolaevich the Elder. In the last days of this event a special commission discussed the ways of dealing with epizootics of cattle plague, which were defined as the major problem of livestock breeding in the empire.[192] The initiator of this discussion was none other than Peter Iessen, who, as was shown

[189] L.O. Pavlovich, "Otchet po otdelu rogatogo skota na Vserossiiskoi sel'sko-khoziaistvennoi vystavke v g. Khar'kove, 1887", in *Opisanie Vserossiiskoi sel'skokhoziaistvennoi vystavki v g. Khar'kove 1887 goda* (Khar`kov, 1890), 60.
[190] Aleksandr Minkh, *Istoriko-geograficheskii slovar' Saratovskoi gubernii* vol. 1, issue 3 (Saratov, 1901), 584-5.
[191] *Otchet Novomoskovskoi uezdnoi zemskoi upravy Novomoskovskomu 35-mu ocherednomu uezdnomu zemskomu sobraniiu* part 2 (Ekaterinoslav, 1867-1914), 4.
[192] *Otchet o Pervoi Vserossiiskoi vystavke rogatogo skota 1869 goda* (Saint Petersburg, 1870), 242.

in the previous chapter, stayed behind numerous experiments with and actual practical use of the inoculation against cattle plague. The fact that the government in 1863 decided to fund further experiments with inoculation did not stop Iessen from looking for means of achieving his grand-plan—the thorough eradication of cattle plague. Looking for other supporters, he tried to use the opportunities for his work opened by the establishment of zemstvos in 1863. For example, already in 1866, he asked El`izavetgrad district board of Kherson province whether it would help to establish a station for inoculation on its territory.[193]

The above-mentioned Exhibition provided him with a new opportunity to address his plan to the state. He submitted a short document in which suggested, quite in line with his proposition from 1853, to introduce compulsory inoculation during epizootics of cattle plague that affect Steppe Cattle and to establish a center for the study of inoculation at the Khar`kov veterinary specialized school.[194] To discuss this proposal, a special commission from among the renown participants of the Exhibition was established. The members included Iessen himself, Maximillian Raupach, mentioned in the previous chapter, who was a student of Iessen and an ardent practitioner of inoculation himself, another prominent veterinarian named Iosif Ravich, Fedor Arnol'd, the most famous Russian scholar in the field of forestry, Nikolai Rozhnov, professor at Military-Medical Academy, Ivan Sergeev, another veterinarian who practiced inoculation, Eduard Gerstfel'd a famous engineer and a member of the State Council, Evgenii Pelikan, the head of the Medical Department of the Ministry of Internal Affairs and several prominent cattle owners. A chair of the commission was Aleksandr Middendorf, a famous scientist whose interests covered a variety of fields.[195]

Several words should be said about Ravich. Since he was gradually acquiring the status of the most respected veterinarian in the empire, his voice in the discussion regarding

[193] *Sistematicheskii svod postanovlenii Elizavetgradskogo uezdnogo zemskogo sobraniia za 1865-1895 gody* (Elizavetgrad, 1895), 371.
[194] *Otchet o Pervoi Vserossiiskoi vystavke rogatogo skota 1869 goda*, 244-5.
[195] Ibid., 243.

inoculation represented another, together with Iessen`s, influential expert opinion. After graduating from Moscow Medical-Surgical Academy in 1850, he worked as an army veterinarian. In 1856, he received a master's degree in veterinary medicine from Dorpat veterinary specialized school, the position of the director of which Iessen left just three years earlier. In 1859 he was appointed as the private-docent at the Medical-Surgical Academy and the next year he was sent abroad for two years to study veterinary medicine. Upon his return, he became an associate professor and in 1867 gained a full professorship. Ravich must have been very familiar with Iessen`s project as in 1863 he became a member of the committee overseeing the experiments with inoculation and during that same year he traveled to several stations in which those experiments had been conducted.[196] It should be reminded here that in 1864 the government stopped to finance that project.

The inoculation of cattle plague was discussed during the Exhibition even before the commission started its work. On 9 October a paper by Raupach was read in front of an audience, though the author himself was not present during the presentation. Raupach`s work was devoted to the successes of the large-scale inoculation against cattle plague in Karlovka estate, which, as was shown in the previous chapter, he had been conducting himself for more than a decade. He pointed to a very high percentage of animals which survived inoculation and argued that the example of Karlovka justified the introduction of inoculation in the Russian empire as the major measure.[197]

After having heard Raupach`s paper, Ravich decided to sketch his own one. He presented it on 12 October. Ravich traced the history of inoculation in Europe in the eighteenth century to claim that a long history of this measure proved its inadequacy. He pointed out that the experiments with inoculation in the Russian empire were connected to Iessen`s belief that

[196] "Ravich Iosif Ippolitovich" in Russkii biograficheskii slovar' vol. 15 (Sankt-Petersburg, 1910), 365-8.
[197] *Otchet o Pervoi Vserossiiskoi vystavke rogatogo skota 1869 goda. Prilozhenie*, 25-8.

cattle plague was emerging spontaneously in the steppe. However, in his opinion, the introduction of inoculation within large territories would only instigate new outbreaks of epizootics. And in addition to that, he continued, it could have been hard to find sufficiently qualified veterinarians to do inoculation in many regions. Instead, Ravich claimed, cattle plague should have been fought against by medical-police measures, which, in fact, were officially in force in the empire anyway. Although he explained the ineffectiveness of medical-police measures by the standard references to superstitious peasants but did not suggest how those measures could have been improved.[198]

On the same day when Ravich presented his work, the above-mentioned commission gathered to discuss Iessen`s propositions. Middendorf saw the commission as an opportunity to learn the voice of cattle owners regarding inoculation, since the Exhibition provided a rare occasion for such share of opinions. He imagined cattle owners as a homogenous group which had a chance to communicate with the representatives of the state and scientists. Such public dialog, undoubtedly, reflected tendencies characteristic for the epoch of the Great Reforms.[199]

Iessen, however, was visibly disappointed in Middendorf`s position, since he saw the work of the commission as a chance to convince the head of the Medical Department to support his project, just as he had managed to convince another commission back in 1853. Important differences with earlier times were, however, that now he had to convey his opinion personally rather than through a text and to face stronger opposition. In addition to that, in comparison to the 1850s, officials supervising veterinary control in the 1860s had much clearer vision of how to fight against cattle plague and ideas related to the progress of veterinary knowledge, unlike in the case with the Ministry of State Domains, were not of interest to them.

[198] Ibid., 36-40.
[199] *Otchet o Pervoi Vserossiiskoi vystavke rogatogo skota 1869 goda*, 246.

Iessen explained that he was aware that the Veterinary Committee of the Ministry of Internal Affairs started to consider the compulsory killing of infected animals as the main measure against cattle plague and recognized its potential effectiveness. At the same time, in his opinion, such measure could not have been effective in the steppe region because of its alleged specificity.[200]

The strongest opponent of the idea of inoculation was Pelikan, who agreed that such method could be practiced by cattle traders on their own, but it was not possible to introduce it as a standard measure. Instead, he informed that the Veterinary Committee, which was subordinated to the Medical Department, the head of which Pelikan was, was considering the introduction of the compulsory killing and insurance of livestock—the most popular measures in Europe. Pelikan suggested to the members of the commission that the compulsory killing, therefore, was much more interesting, than inoculation, issue to discuss.[201]

He faced, however, quite a strong disagreement with such position. Some members suggested that the introduction of the killing could not be introduced in the nearest future and that its implementation could encounter the resistance of peasants. Most of the members claimed that inoculation should be supported by the state and that, unlike in Pelikan`s view, it was compatible with the compulsory killing. Several contentious topics related to inoculation, as a result, arose.[202]

The commission debated about practical issues related to the large-scale introduction of inoculation and it was still unclear to what extent this method could be effective. The example of inoculation in Karlovka was described by Iessen and Raupach as the unequivocal evidence of its efficiency. Iessen believed that inoculation could have been especially effectively introduced in the steppe. Unlike in the 1850s, he explained the specificity

[200] Ibid., 244.
[201] Ibid., 246.
[202] Ibid., 246-7.

of the steppe not by pointing to the alleged fact of the spontaneous emergence of cattle plague there, but by arguing that Stepper Cattle was more resistant to the disease and, thus, fewer animals were to die from the artificial infection; this, in fact, was probably a correct observation.[203]

To Iessen`s bitter disappointment, Pelikan was not persuaded and was impatient to discuss the compulsory killing and insurance.[204] Ravich, however, appeared to be the most ardent opponent of the compulsory killing. He claimed that it was impossible to implement such measure in the steppe. The idea of the compulsory killing required that not only clearly sick cattle were to be killed, but also all animals which possibly had contacts with the source of contamination. Building on that, Ravich argued that because death rates from cattle plague among Steppe Cattle were considerably lower than among other breeds, which meant that a lot of animals could survive epizootics, the introduction of the killing would turn into a mere slaughter.[205]

Pelikan backed his idea by saying that the killing helped to eradicate cattle plague in many European countries. Such justification through the example of European success failed, however, as several members of the committee pointed out, to account for the specificity of the geography and livestock trade in the Russian empire. Whereas in European countries it was often enough to stop the spread of cattle plague within a certain locality, the main characteristic of the Russian empire in that regard was that droves were constantly moving throughout the country and, therefore, were recurrently disseminating the infection.

Taking into account such specificity of the movement of livestock in the Russian empire, one of the landlords proposed to move droves only by railroads. In fact, several people came up separately with the same idea already in the 1850s, but it did not gain popularity at

[203] Ibid., 248-9.
[204] Ibid., 251.
[205] Ibid., 252.

that time.[206] Such measure started to circulate actively within different state bodies only in the second half of the 1860s and Pelikan also mentioned that the Medical Department was just discussing such measure. Eventually, the compulsory transportation of livestock by railway was introduced more than a decade later and it became the major factor which contributed to the almost thorough eradication of cattle plague at the end of the nineteenth century. However, unlike in the case of inoculation, discussions regarding usefulness of such measure did not become that much heated and they were mostly confined to official cabinets, since, apparently, there were no groups, like veterinarians for example, eager to promote their interests related to the transportation by railways.

Not dismissing the idea of transporting cattle by railways, veterinarians, however, sought for a solid scientific ground behind each measure. Ravich proposed to create a commission that would study the spread of cattle plague in the steppe and finally establish whether it was emerging there spontaneously.[207] He himself believed that cattle plague was emerging *de novo* within droves on their way due of physical exhaustion, an idea—inaccurate from what we know today—which was popular since the first half of the nineteenth century. Arguing against Pelikan, Ravich, thus, slightly changed his initially negative attitude to the measure of inoculation. Gerstfel'd and Middendorf also disagreed with Pelikan that the compulsory killing was the most convenient method and agreed with Ravich and Iessen that inoculation could be introduced in the steppe region.[208]

Having not finding any allies, Pelikan had to make concessions and recognized that the steppe was indeed not suitable for inoculation. The final conclusion of the commission accepted by all of the members, which did not have any legal force of course, included several points, summarizing the work of the commission. It suggested that specialists in inoculation

[206] Daniil Mordovtsev, *O vazhnosti soedineniia srednego Povolzh'ia s tsentrom Rossii i iuzhnymi moriami* (Saratov, 1853), 18.
[207] *Otchet o Pervoi Vserossiiskoi vystavke rogatogo skota 1869 goda*, 270.
[208] Ibid., 272.

should be prepared in Karlovka and that a special publication about the successes of inoculation in Karlovka should be published and sent to zemstvos in order to popularize this method. As Ravich suggested, it was recommended that a special commission should be sent to the steppe. Also, the transportation of droves by railways was recognized to be a desirable measure. Most importantly, however, in contrast to the viewpoint of Pelikan, who, it should be reminded here, was the head of the Medical Department, the commission concluded that the compulsory killing could not be introduced in the territories dominated by Steppe Cattle. No less than 19 provinces or parts of them allegedly not suitable for inoculation were listed.[209]

An irony, however, was that, when the Veterinary Committee, which was subordinated to the above-mentioned Medical Department, decided, as will be elaborated in the next sub-chapter, to discuss the matter of the killing with zemstvos two years later after the work of the commission, it did not mention the idea of the specificity of the steppe at all. The results of the commission which supposed to bring together veterinarians, cattle owners and officials, therefore, were totally ignored the Medical Department. The alleged unity and the equality of the members of the commission appeared to be highly artificial. Even though Pelikan should have had to defend his position, it was rather a public ritual than a truly important discussion.

Even though the minutes of the discussion do not reveal any hierarchies between the members of the committee, they were speaking from quite different perspectives. Iessen, Raupach and Ravich tried to gain some benefits by promoting their views on cattle plague based on veterinary medicine. Their expertise was recognized by the all members, who mentioned that the issue of whether inoculation as such was effective was a matter to be decided by veterinary science and that therefore they should rely on veterinarians` opinions. The latter themselves were eager to appeal to the authority of science. Especially impatient was Iessen,

[209] Ibid., 278.

who wanted at last to implement his master-plan. It is by no accident that Middendorf, in order to mitigate the fervency of some of the members, had to remind several times that the commission was not vested with the power of deciding whether inoculation should be introduced as a general measure.

To illustrate the role of bureaucratic language in the discussion of the commission it is helpful to look at the representations of peasants by some of its members. It appears that, in contrast to representation of peasants, as was shown in the previous chapter, as being virtually unable to follow regulations because of their superstitiousness, several members of the commission even described peasants as quite sagacious and able to perform inoculation or distinguish cattle plague from other animal diseases.[210] Even more so, such image of rational peasants did not provoke any objections, including from Ravich, who, as was mentioned above, had referred to superstitious behavior of peasants in his lecture before the meeting of the commission.

Rhetoric about superstitious peasants, thus, barely informed any actual calculations of officials or veterinarians. It was rather used quite sporadically and unsystematically, in order to meet the specificity of certain contexts. Such role of the images of peasants match the finding of the previous chapter, according to which, the rhetoric on the irresponsible behavior of peasants, while being quite often used, was, in fact, a product of local authorities which tried to underscore their power. This suggests one more time that representations played negligible role in the function of the state machine.

Another important aspect of the discussion by the commission is the role of the state. In my view, it allows to complicate the abstract notion of the "state" from the perspective of the representations of the state, its perceptions and the ways bureaucrats acted depending on different situations. It is interesting that while there were two high-ranking officials among the

[210] Ibid., 251, 266.

members, some of the participants mentioned "the government" as something completely unrelated to the work of the commission. In addition to that, none of the two officials tried to fashion themselves as representatives of the state.

Pelikan tried to keep discussions as unconnected to the details of the work of certain state bodies as possible. Importantly, a year before the Exhibition, a law aimed at the control by veterinarian of herds moving to urban centers or fairs was issued. It was the first law connected to epizootics that appeared in the second half of the century. However, quite tellingly, Pelikan did not mention its existence, let alone detailed explanations on its role. After Ravich tentatively mentioned some points from the law, Pelikan even asserted that the commission should not pay any attention to it and should concentrate instead on more abstract ideas of how to deal with cattle plague.[211] He, thus, actually avoided the opportunity to speak on the behalf of the state body he was representing and preferred instead to hide his role of an official.

Pelikan instead eagerly played the role of a member of a society, but, eventually, he did not incorporate the conclusions of the commission into the work of the Medical Department. Even though the conclusion that officials performed different roles in different contexts might seem obvious, it has implications for thinking about the ways in which knowledge was produced, spread and (not)used. Zemstvos created a crucial opportunity for disseminating new knowledge and images throughout different regions. Using such means, the commission agreed to write and sent to zemstvos a publication describing the usefulness of inoculation. That was a kind of semi-official decision as the state played an ambiguous role in it. From the perspective of Pelikan, such actions were aimed not at the protection of power through certain justificatory narratives, but actually at the disguise of his real power, meaning the ability to perform certain policies without taking into account publicly known narratives.

[211] Ibid., 268.

In other words, on the one hand, he was, in a way, forced to formally agree on ideas he did not actually share, but, on the other, Pelikan was careful enough to not reveal his real intentions, let alone to voice them forcefully.

The second half of the century and the precedent of the cooperation between the state and veterinarians, despite its limits, gave many specialists a sense of hope that they could exert a considerable influence on the parts of state governance related to epizootics. Those hopes were left, however, unfulfilled. The project of inoculation provoked important communication between bureaucrats and specialists, which expanded also to include the perspectives of landlords. The state partook in and facilitated such communication, which led to the emergence of different kinds of views, representations and hopes. Apart from such production of meanings, there was, however, the hierarchy of state bodies which, in their operation, did not actually consider knowledge which was often produced through the mediation of the state.

3.2. Discussing a Radical Measure: Compulsory Killing

The role of zemstvos in various developments in the Russian empire has been much debated in historiography. Zemstvos are often viewed as forces increasingly oppositional to local and central tsarist authorities. Disparity in political vision presumably translated into conflicts over the competences of zemstvos and state authorities on the local level. Additionally, post-emancipation progress in social welfare, especially in the spheres of medicine and education, is rarely mentioned without references to the autonomous efforts by zemstvos. However, many scholars consistently undermined this one-sided image and pointed to zemstvos` multilateral character tending to change considerably over time. Historians

justifiably point that medicine and education were the major projects of zemstvos in terms of resources, efforts and achievements. However, there are many reservations to be mentioned.

Nancy Frieden, among other things, analyzes first decades of the function of zemstvo medicine.[212] She argues that despite the scope of problems, initial reluctance of zemstvo functionaries to develop medical care and conflicts between the latter and physicians, zemstvos made a considerable progress in advancing public health system, not least because of the infrastructure inherited from pre-reform period. However, the major aspect of arising zemstvo medicine, according to her, was the eagerness of zemstvo physicians to implement the most up-to-date measures of preventive medicine. In a similar vein, Samuel C. Ramer and Catherine Evtuhov argue that although zemstvos did not achieve considerable quantitative results in the sphere of peasants' health conditions, they created framework necessary for further advancements.[213] Zemstvo veterinary medicine was quite different from these developments. It did not have the foundations to rely upon and it clearly attracted less attention. Also, veterinarians presumably did not contribute much to social activism for which zemstvos are mostly famous. Ben Eklof argues that up to 1890s zemstvos` contribution to primary education was modest to say the least. This was the result of not only the shortage of available sources, but also of the prevailing idea that the initial initiative of the establishment of schools should come from peasants` communities. Only after attitudes shifted toward the increase of the network of primary schooling and especially since the government started to allocate much more funding, significant changes in this sphere did occur.[214] The case of measures against cattle plague also hints at the essential role of the top-down initiative, which, in this case,

[212] Nancy Madelker Frieden, *Russian Physicians in an Era of Reform and Revolution, 1856-1905*, (Princeton: Princeton University Press, 2014), 77-104.
[213] Samuel C. Ramer, "The politics of zemstvo medicine," in *The Zemstvo in Russia: An Experiment in Local Self-Government,* ed. Terence Emmons and Wayne S. Vucinich (Cambridge ; New York: Cambridge University Press, 1982); Evtuhov, *Portrait of a Russian Province*, 149-152.
[214] Ben Eklof, *Russian Peasant Schools: Officialdom, Village Culture, and Popular Pedagogy, 1864-1914* (Berkeley: University of California Press, 1986), 50-96.

contributed to the rise of veterinary control. This view does not necessarily set a model for other processes in the Russian empire, but it still seeks to dilute generalizations. While zemstvos were granted with the right to take care of many aspects of local welfare, generally, there were nor prescriptions on goals to be accomplished, and, in regard to many areas of authority, activity was optional rather than mandatory, In contrast to that, the law regarding the compulsory slaughter was shouldered on zemstvos as obligatory. On the one hand, this gives more credit to the state`s role in initiating and formulating a particular policy expected to have implications on the local level in contrast to the preeminence of local actors only remotely responding to vague suggestions from above. On the other, this case shows that there is no definite answer to question about the place of zemstvos vis-à-vis the central government as there was a variety of functions delegated to and performed independently by zemstvos.

At the end of 1871 the government started a discussion of a measure, namely the killing of sick and suspected cattle, that defined the efforts of zemstvos at combating cattle plague a decade later. It should be reiterated here that this measure was energetically advertised by the head of the Medical Department during the polemics at the Exhibition of livestock two years earlier. The Veterinary office of the Medical department of the Ministry of Interior Affairs sent out to zemstvos and governors a circular dated 30 October 1871, which explained the nature and the causes of damage caused by cattle plague, designated the measures that might be taken and requested the local powers to send back answers to four questions.[215] The circular resorted to the standard accusation that the population caused the spread of epizootics. According to it, cattle plague took away peasants` major asset, so they tried to preserve at least something, that their removed skins from corpses and cattle traders concealed the disease from authorities out of fear of loosing revenue. Such behavior, reportedly, was utterly egoistic as peasants and cattle traders were trying to benefit at the expense of the well-being of a society.

[215] RGIA, f.1302, op. 1, d.184., l. 5.

Thus, even though recognizing the often-desperate economic position of peasants, the document still puts the ultimate responsibility for the spread of cattle plague upon them.

Ekaterina Pravilova shows that in the second half of the ninetieth century in the Russian empire discussions over property rights were riddled with controversies of how to balance what was formulated as private and public interests.[216] As this case of the construction of the roles of different actors in causing the spread of the disease suggests, the issue of individual versus public interests motivated also the evaluation of behavior and actions in more general terms as well. Disregarding the question of whether peasants were even conscious of the potential harmfulness of their actions, the state implied their culpability.

It is telling that the circular did not mention landlords who, obviously, owned large amounts of livestock, which equally suffered from the disease. Such omission reflects the traditional understanding of nobility`s separateness and immunity from intrusions of local intrusions as well as understandable reluctance to criticize the estate considered to be a pillar of the monarchy. In addition to that, misfortunes, such as poor harvests, diseases, fires and poverty in general, were imagined as essentially rural, that is, related to peasants. Most importantly, however, the circular simply replicated standard bureaucratic clichés concerning epizootics, the emergence of which was discussed in the previous chapter.

The idea of killing of the suspected beasts was explicitly modeled on the implementation of such measure in many Western European countries and Congress Poland. On the territory of the latter it was employed since 1856, with additional law issued in 1870, and with considerable success. Even though Congress Poland was fully integrated into the general administrative system of the empire, the active measures against cattle plague were taken there quite earlier, which was the result of local initiative.[217] Congress Poland, thus,

[216] E. A. Pravilova, *A Public Empire: Property and the Quest for the Common Good in Imperial Russia* (Princeton; Oxford: Princeton University Press, 2014), 8-10.
[217] PSZ, I., 48576 (20 July 1870), 85-89.

served as an intermediary for the transfer of the veterinary measure from the West to the Russian empire.

Zemstvos and governors received from the Veterinary Board dispatches consisting of a lengthy description of the European success-story in implementing the killing of cattle, which justified the need to use such radical measure in the Russian empire, and the regulations regarding cattle plague in Congress Poland. Zemstvos were to give their opinions on the practicality of such measure in relation to their respective provinces and to provide an information on the approximate number of cattle in provinces, average prices of cattle, average losses in livestock caused by cattle plague and a number of veterinarians needed for the identification of the disease. Governors were to give their opinions about the zemstvos` suggestions and send back all collected materials in a period of not more than half a year. In the provinces in which the zemstvos were not established the task was entrusted to governors only.[218]

The practice of the central authorities of consulting zemstvos and local authorities and gathering information about specific regions, while keeping the monopoly on the eventual decision, was not exceptional to this case.[219] However, the responses from the zemstvos and governors reveal the multitude of local and individual perceptions of scientific ideas about cattle plague, their usage for the negotiation of policy suggested by central government and delimitation of the authority of local bodies as they perceived it.

Undergovernance in the seized peripheries and the lack the authorities knowledge about regions required the Russian empire to rely on local intermediaries.[220] The zemstvos served a similar function in the imperial core which suffered from the absence of effective

[218] RGIA, f.1302, op. 1, d.184., l. 6-6ob.
[219] Igor` Khristoforov, *Sud'ba reformy: Russkoe krest'ianstvo v pravitel'stvennoi politike do i posle otmeny krepostnogo prava* (1830–1890-egg.) (Moscow, 2011), 287-8.
[220] Ian W. Campbell, *Knowledge and the Ends of Empire: Kazak Intermediaries and Russian Rule on the Steppe, 1731-1917* (Ithaca: Cornell University Press, 2017), 4-5; Kelly Ann O'Neill, *Claiming Crimea: A History of Catherine the Great's Southern Empire* (New Haven; London: Yale University Press, 2017), 53.

bodies capable of carrying out different policies and closely interacting with the local population. At the same time, even though allowing the existence of the all-estate institution, the government wanted the zemstvos to stay close to the common mode of governance, let alone their political loyalty. Tellingly, the government did not establish the zemstvos the northern provinces on the ground that there was a lack of landed nobility there.[221] The information about cattle plague provided by the zemstvos was to be checked by governors.

Most of the responses, both by governors and zemstvos, were sent back to Saint Petersburg in 1872. These sources are valuable for illustrating the existence and emergence of views of zemstvos which were different from those of local authorities and the Veterinary Board. At the same time, they indicate a considerable diversity of such views and local perspectives. In addition, they were not completely separated from the views of bureaucrats and there were overlaps between the two.

It has been shown throughout this work that the representations of peasants were an indispensable part of explanations and justificatory claims of various actors and individuals. This is true for this case as well. The governors explained the causes of epizootics in standard formulations that blamed peasants for not following medical-police measures.[222] Although, unlike medical boards, they did not mention, of course, police as being responsible for the spread of the disease. In contrast to that, some zemstvos, while mentioning that medical-police measures were ineffective indeed, did not specify that some parties were responsible for a poor implementation of them.[223]

Those governors who doubted that compulsory killing could be introduced in their provinces used the image of superstitious subjects also to back their reasoning behind such decisions. The governor of Semipalatinsk province (*oblas`t`*) claimed that while such measures

[221] Yanni Kotsonis, "Arkhangel'sk, 1918: Regionalism and Populism in the Russian Civil War," *The Russian Review*, no. 4 (1992), 529.
[222] RGIA, f.1302, op. 1, d.184, 185, 409ob.
[223] Ibid., 170

could be undoubtedly successful in the European part of the Russian empire, it was impossible to introduce it in the steppe parts of Western Siberia. A reason for that was that Kyrgyz people did not allow the counting of their livestock because they believed that that would cause epizootics. That it is why they reportedly tried to avoid knowing the amount themselves.[224] The governor of Tyrgai province noted in a similar vein that Kyrgyz were not mentally developed enough to understand ideas related to the compulsory killing.[225] The governor of Tobol`sk province claimed that the compulsory killing would be inconvenient simply because some of the districts of that province were larger than some of European countries. In addition to that, he also stressed that peasants from Europe were more developed than the local ones.[226]

Unlike in the case of describing the causes of the spread of epizootics, some of the zemstvos, like the above-discussed governors, referred to the backwardness of the local population in order to underscore the problematic character of the compulsory killing as well. For example, a commission created to consider measures against cattle plague reported to the Orlov provincial zemstvo council that the compulsory killing would have faced considerable obstacles because it would have been hard to explain to the local population the logic of such a measure. It was with cattle traders, who were reportedly more developed, with whom a cooperation should have been established.[227] The Dnieprovs`k district zemstvo board, from Tavrida province, reported to the local zemstvo council that, while there was a practice in Polish provinces according to which there were three peasants in each village who were instructed how to identify cattle plague, it was doubtful that local peasants could have performed the same task.[228] Thus, as in the case of Tobol`sk province, peasants of a certain locality were perceived as backward not simply as such, but also in relation to non-Russian

[224] Ibid., 72.
[225] Ibid., 54ob.
[226] Ibid., 780ob.
[227] Ibid., 31ob.
[228] Ibid., 280

population. Besides such telling parallels, zemstvos, of course, often operated on the basis of different views on peasants than those of local officials. One of the district zemstvos, for example, comprised regulations regarding fight against cattle plague, according to which peasants were to be extensively informed about the nature of the disease and measures against it, implying that peasants could be trusted in such matter.[229] Thus, there were both considerable similarities and gulfs between the ways zemstvos and authorities represented peasants.

A graphic illustration of views on the behavior of peasants that could have been shared by members of zemstvos is provided by a statement written by a member of Saratov zemstvo named Fomin.[230] He reportedly missed a session during which cattle plague was discussed and, since that topic was dear to his heart, he decided to write a special letter to members of zemstvo. As the letter was written in a narrative and unofficial style, it reveals his beliefs and local identities quite distinctly. In a sharp contrast to the discourse of medical boards, governors and finally the Veterinary Board, he depicted peasants as victims of unfortunate situation and even presented their behavior as the rational one. Instead, according to him, it was veterinarians who, in fact, were irrational strange and useless. Fomin pointed out that peasants should not be blamed for not following medical regulations as they simply do not have means to do so. For example, they did not have enough cowsheds to separate sick and health cattle. In addition to that, he claimed that cattle plague usually appears during harvest time, which meant that there were only children and old people in homes.[231]

Fomin also stressed that even though legislation prohibits and punishes the removal of skins from cattle dead from cattle plague, peasants, from the perspective of conscience, are innocent as they are forced to do so by hardships. A peasant who lost three cattle could buy at least one cow by selling three skins. As a result, children would not have been left without

[229] Ibid., 409 ob.
[230] Ibid., 310.
[231] Ibid., 311.

milk, so Fomin fully supported such illegal actions.[232] Such a romantic depiction of peasants closely resembled the ways, analyzed in the previous chapter, in which sufferings from cattle plague were formulated by landlords in the first half of the nineteenth century. The established interaction between zemstvos and the Veterinary Board allowed the former to communicate them to central authorities directly.

Four years earlier, Fomin himself also had had a chance to witness the fact that veterinarians were of no help. According to his story, there was an outbreak of cattle plague in his village at the end of June 1867, which lasted for 15 days and claimed all the cattle. He himself lost 40 heads, despite applying the medical treatment known to him.[233] From the beginning of the epizootic, village authorities informed zemstvos about misfortune. However, a veterinarian showed up only at the end of August, that is more than a month after the start of epizootic. He had approached Fomin, the letter tells, and demanded from him to show sick cattle or, otherwise he would have to force Fomin to do so with the help of the police. The author of the statement was truly amazed by such demand and simply pointed out that all livestock were buried long ago. The only thing the veterinarian did was that he gave to Fomin some instructions, which were useless as they were written in Latin.[234] Although the veterinarian was hired by the zemstvo, from the perspective of Fomin, he was represented the veterinarian professional group rather them the zemstvo. Thus, Fomin turned upside down the standard discourse of the medical authorities, which blamed peasants and defended veterinarians or physicians. Therefore, the progressive rhetoric of some of the zemstvos was closely interconnected with the language circulating within state bodies.

The letter by Fomin exposes the fact that zemstvos, while not describing peasants in the ways in officials did, were careful to make sure that they composed their responses in a

[232] Ibid., 311ob.
[233] Ibid.
[234] Ibid., 312.

language that would resemble official style, hiding, therefore, their identities, possibly opposite to the bureaucratic language sharply. It should be reiterated here that while the initial audience of Fomin`s letter was the local zemstvo, even though the document eventually reached Saint Petersburg, the rest of the responses discussed here were initially written as reports to be presented to zemstvo councils and then, without considerable changes, to be sent to the Veterinary Board. This fact clearly influenced the ways in which zemstvos formulated their opinions, as they used more formal language.

For example, the Bezhetsk district board from Tver` province reasoned about practical matters connected to the implementation of the compulsory killing.[235] While it mentioned that peasants would not recognize such measure because they saw diseases as the manifestation of god's wrath which should be accepted with humility, thus, implying, superstitious beliefs, the board did not use such observation to simply underscore its power or to dismiss the measure in the first place. In fact, the report was written in a highly formal and neutral style and was structured to convey the explanations of practicalities regarding the compulsory killing. It explained that superstitious beliefs should be fought against and that the implementation of such measure should not be handed over to cattle owners themselves because persons who lost their cattle suffer emotionally (*dushevno niespokoiny*) and therefore cannot perform their duties properly.[236] Building on that, the board concluded that the interests of the society could not be sacrificed to the interests of private individuals, an idea that was increasingly gaining popularity in the second half of the nineteenth century.[237] Thus, a private letter of the member of provincial zemstvo and the official report of the district zemstvo board provide two considerably dissimilar examples of the representations of peasants.

[235] Ibid., 501-2ob.
[236] Ibid., 502.
[237] Ibid., 502ob.

While the majority of both governors and zemstvos recognized that compulsory killing could be a necessary and helpful measure, some of them, on the basis of local conditions, voiced certain reservations. Thus, the Iaroslav provincial zemstvo board agreed that the compulsory killing was the only possible measure. But, because there were special breeds, Iaroslav province should have been included into a special category.[238] The Dnipro district zemstvo board claimed that such a measure would kill more cattle than save, as more than half of livestock infected by cattle plague in that district survived the disease.[239] Exceptional were the cases of Arkhangel`sk, Vologda Tver` provinces, the governors of which rejected the compulsory killing on the basis that there simply was no cattle plague in those territories.[240] A few of the responses underscored also that some other animals disease should be considered as well, not just cattle plague. The opinion of the deputy of the Kherson zemstvo provides a vivid example of the importance of the perception of European experience regarding cattle plague. Namely, he argued that the question of measures against cattle plague should be postponed because it was not yet resolved even in Europe.[241]

The most extreme case of a rejection of compulsory killing was presented by the Khar`kov zemstvo. It rejected the compulsory killing outrightly and, quite tellingly, suggested that only inoculation could be implemented in that region.[242] In fact, it repeated a lot of conclusions reached by the commission which, as shown in the previous subchapter, discussed the matter of inoculation during the First all-Russian exhibition of livestock. It is even possible that the Khar`kov zemstvo drew their reasoning for a publication advertising inoculation, which, according to the decision of the commission, was supposed to be written and sent to

[238] Ibid.,184, 176
[239] Ibid., 280ob.
[240] Ibid., 92, 100, 533.
[241] Ibid., 367.
[242] Ibid., 258.

zemstvos. Such conclusion could be drawn on the basis of the fact there were clear parallels between the zemstvo`s ideas and the commission`s conclusions.

The zemstvo explained that while compulsory killing was successfully used in Europe, it could not have been introduced in the steppe region of the Russian empire because cattle plague was emerging within Steppe Cattle spontaneously.[243] Therefore, the killing of sick cattle allegedly could not really prevent the spread of cattle plague as it would reappear recurrently within Steppe Cattle. In addition to that, it presented statistics according to which only half of cattle which were infected by the disease actually died, while the rest of the animals recovered. That meant, according to the source, that the implementation of killing would simply result in the slaughter of a lot of cattle, which otherwise could have survived.[244] The zemstvo proposed to promote the method of inoculation and to establish several research centers in the province. It asserted that a commission for the study of inoculation should be created and headed by Maximilian Raupach, the veterinarian of Karlovka estate, whose role in the project of inoculation was explored earlier in this work.[245]

At the same time, while the zemstvo`s report sounded quite hostile to the central authorities` suggestion, it still recognized that both the practicability of inoculation and the idea of the spontaneous emergence of cattle plague within Steppe Cattle were quite unclear and in need of further studies.[246] In any case, ironically, the Veterinary Board had to face quite confident opposition, which resulted from unintended consequences of the support by the state of the project of inoculation in 1853-1864 and, more importantly, of the work of the commission comprised of the participants of the above-mentioned Exhibition, among which there was the head of the Medical Department Pelikan, who acknowledged himself the conclusions of the commission. Tellingly, the Medical board of Khar`kov province disagreed

[243] Ibid., 263
[244] Ibid., 261ob.
[245] Ibid., 259.
[246] Ibid., 265.

with the zemstvo and claimed that there was no actual proof that cattle plague emerged spontaneously in the region, but instead, observations showed that infection was always brought in from without the province.[247]

Even though the report of Khar`kov zemstvo is uniquely insistent in its claims, it was not alone in pointing to the specificity of the steppe region and Steppe Cattle. For example, the Perekop disctrict zemstvo board from Tavrida province correctly concluded that Steppe Cattle were more resistant to cattle plague.[248] At the same time, members of Tavrida province zemstvo assembly, while concluding that the compulsory killing could be useful, did not reach agreement on whether Steppe Cattle had some unique features in regard to cattle plague.[249] The idea of the specificity of Steppe Cattle was voiced also in the meeting of Kherson province zemstvo assembly.[250] The governor of Tavrida province, repeating, of course, what he learned from the local Medical board, reported that the main cause of epizootics were *chumaks*, but also that there were instances of the spontaneous emergence of cattle plague caused by physical exhaustion of livestock.[251] In another case, a member of Roslavl` district zemstvo assembly from Smol`ensk province concluded that the compulsory killing could be introduced everywhere except the steppe provinces. Thus, local identities connected to cattle plague, livestock breeding and the steppe, which emerged in the first half of the nineteenth century, were reinforced in the second half of the century, not least, because of the state`s support of and engagement with the idea that inoculation could prevent the emergence of cattle plague in the steppe.

Some of the original interpretations of the nature of cattle plague and thoughts on measures against it which were not necessarily connected to the issue of the steppe. Most

[247] Ibid., 271-2ob.
[248] Ibid., 147
[249] Ibid., 133.
[250] Ibid., 367ob.
[251] Ibid., 125ob.

zemstvos and governors were aware of the controversy of whether cattle plague was exclusively contagious, or it could emerge also spontaneously due to some unfavorable conditions and claimed that they are convinced in the correctness of the former explanation. However, there were also some important exceptions. For example, a meeting of Astrakhan` physicians and veterinarians concluded that cattle plague could emerge from stagnant waters.[252] The governor of Vologda informed that according to the majority of contemporary veterinarians cattle plague could emerge spontaneously everywhere.[253] It has been argued in the previous chapter that the state did not attempt to impose a universal explanation of cattle plague. As these responses suggest, that led to a considerable heterogeneity of views of local authorities and zemstvos on the nature of epizootics.

By analyzing how ideas and beliefs which took their shape before the 1860s gained new meanings during the times of the Great Reforms, this chapter elucidated hidden mechanisms of the function of the state authority in the Russian empire and the patterns of the behavior of bureaucrats. It turned out that even the support by the state of such seemingly innocent project as experiments on inoculation might have escalated into quite a contentious issue. It was, thus, especially dangerous for the state to engage in endeavors which were seemingly apolitical as they were the convenient to be turned against the initial intentions of the state. Quite tellingly

[252] Ibid., 105
[253] Ibid., 101ob.

Conclusion

This thesis covered two topics: the development of ideas and measures related to epizootics of cattle plague in the Russian empire and the ways in which this empirical material helps to understand the logic of the function of the state power.

The measures against epizootics during the eighteenth century followed the patterns of ad hoc decrees and legislation based on precedent cases. The state did not develop consistent set of rules and did not offer a clear explanation of the nature of animal diseases. This, however, is hardly surprising as these actions of the authorities reflected more broader patterns of unsystematic state governance in the Russian empire in general during that time. The institutionalization of veterinary medicine in the Russian empire begun several decades later than in the majority of European countries. However, a transfer of European medical discourse into the Russian empire through the mediation of foreign doctors in 1760s reveals a peculiar phenomenon related to relationships between the state power and knowledge: it was the only decade in the history of the Russian empire when it allowed a highly symbolical language related to medicine/veterinary to be integrated as a part the state authority.

The first half of the nineteenth century witnessed the emergence of a first generation of veterinarians who were educated in the Russian empire and then get jobs provided by the state. It was also a time of the homogenization and systematization of local and central state bodies. The collection of reports on epizootics from local medical authorities coupled with the dissemination of specialized veterinary knowledge led a gradual realization that cattle plague was the most widespread and devastating epizootic in the Russian empire. Legislation prescribed to combat epizootics with medical-police measures. Entrusted to local police and medical administration, they, predictably, had a negligible practical impact. Looking for more efficient methods, the government supported experiments with inoculation against cattle plague during the 1850s, which, however, did not bring the expected results.

Inevitably, the descriptions of cattle plague were framed within broader discursive practices. The thesis showed that attempts and policies aimed at combating and eradicating epizootics instigated a variety of contacts and interlinks between different social, professional, local groups, individuals, the representatives of the state and representations and ideas created by all of them. Importantly, the state did not attempt to create a heterogenous language that would have clearly defined and justified its position concerning cattle plague, behavior of peasants, work of local authorities etc. Instead, there was a multitude of narratives, tropes and discourses, which could have been easily reformulated depending on different contexts and the usage and importance of which was highly depended on a type of state body, rank of bureaucrats and personalities which engaged with them. Even though the problem of cattle plague attracted constant attention of the state and the society and was integrated into the function of local authorities, the state never implicitly or explicitly claimed that certain ideas or images related to epizootics should be accepted and replicated unconditionally. There was, thus, a kind of chaos of ideas and representations, which, nevertheless, did not undermine the state power directly as the latter protected its legitimacy, in this particular case, not through symbols and rhetoric, but by the very fact of its existence and a hierarchy it entailed.

As veterinarians highly depended on the state support, they unequivocally demonstrated their loyalty to it and tried to gain benefits by pointing a potential of veterinary medicine and by suggesting changes in the function of local authorities in general. Veterinarians and some activists of noble origins not only offered their explanations of epizootics and proposals of some measures against them but also depicted the work of local authorities as the one which should be reformed and depicted the realities of rural areas as quite desperate and not touched by the state`s rule in any way.

Despite such general uncertainty, a few general issues related to representations and actual practices crystallized separately from each other during the period before 1860s. The

first was the representation of peasants. They were universally depicted in negative terms in official documents of both local and central authorities. Such imagery, however, could be regarded as official only with the reservation that it was created by the local authorities in order to assert their power and then it was internalized unintentionally by the central bodies. Allying with the state, veterinarians, in their published, works also blamed peasants. There were, however, also positive depictions of peasants related to the context of epizootics. These were created by landlords with romantic worldview. There were, however, no direct clashes between these images because the political mood of the time generally disapproved such minor conflicts.

Another issue that emerged was the project on inoculation. A plan submitted by one highly energetic veterinarian appeared to match the interests of some state bodies. It was especially important that such project connoted relatively strong symbolical meaning since it appealed to the authority of science and promised to eradicate cattle plague once and for all. As a result, many experiments on inoculation against cattle plague were conducted in the second half of the 1850s and the at beginning of 1860s. The project, however, failed and was shut down by the state. It, however, increased the status and confidence of some veterinarians and landlords and, thus, inspired them to claim their interests even after their cooperation with the state ended.

The epoch of Great Reforms provided a fruitful ground for these two issues to be reframed. It appeared that any kind of images could have been used by different sides to suggest their stances. Even though the blaming of peasants was not a well-thought and conscious strategy of the authorities, it nevertheless provoked some opposition and enhanced populist worldview of some of the local elites and veterinarians. Had the state decided to actually assert the negative image of peasants, undoubtedly, the opposition would have become even more energetic.

The issue of inoculation turned into a drama for those who participated in it from its very beginning. Its supporters tried energetically to convince the state to continue experiments and, thus, to bring back privileges it once allegedly promised to them. The supporters` stance was even enhanced even more as the project and identities related to local livestock breeding facilitated each other.

However, the officials were aware that it was unproductive tactics to engage in such discussions as that could make the situation even worse. Instead of asserting images favoring the state power, officials actually never discussed contentious issues explicitly, preferring to allow some degree of heterogeneity rather than taking risk to instigate deeper clashes.

Those who tried to oppose the state or to attract its attention were very vocal, while the state, in many cases, preferred to remain quiet. It is this difference in the usage of knowledge and rhetoric, which, I believe, should be kept in mind when studying the Russian empire.

The history of the Russian empire is often written as the story of unfulfilled programs championed by various progressive activists. This thesis shows that the importance of paying attention to the perspective of those in power.

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