Form versus Matter: Miraculous Relics and Lenin's Scientific Body

Alexei Yurchak

University of California, Berkeley

This paper investigates the unique science of preservation that emerged around the task of maintaining Lenin's body for public display in mausoleum in Moscow. It contrasts Lenin's body to the incorruptible bodies of Christian saints (Catholic and Orthodox) and explores its role in the political history of the communist state. While the bodies of Christian saints are considered intact and incorruptible if their biological matter is relatively unchanged, even if their bodily form undergoes considerable change, in the case of Lenin's body the relation of form to matter is reversed. This body is considered intact because its form (its shape and its dynamic characteristics that include the suppleness of skin, the flexibility of joints, etc) is preserved without change, while its matter is actively and continuously transformed and substituted with new inorganic materials. The unique materiality of this body, the paper argues, reveals previously unseen aspects of the Soviet political project. This analysis is based on ethnographic research in the mausoleum lab in Moscow, interviews with the lab's scientists, and research in several Russian state archives.

For the past 90 years Lenin's body has been displayed in a perfectly preserved state in the Mausoleum in Moscow. Of these, the last twenty-five years have been marked by a heated public debate about that body's future fate. The body has been blamed for all the ills of the country and celebrated as a symbol of its successes. In some academic and journalistic publications it has also been compared with the relics of Christian saints. Such comparisons are usually made in somewhat vague terms. Some authors claim that the Soviet regime from its inception always drew an implicit parallel between Lenin's body and the bodies of Orthodox saints because in a country with a strong Orthodox tradition, like Russia, drawing such a parallel made sense. The new revolutionary regime, goes the argument, manufactured its own sacred revolutionary "relic" because that relic added legitimacy to the regime in the eyes of a predominantly "religious" and "backward" population. Such arguments may seem self-evident, but their obviousness makes one pause. Apart

Outi Hakola, Sara Heinämaa and Sami Pihlström (eds.) Death and Mortality – From Individual to Communal Perspectives

¹ For this line of argument see, for example Gill 1980; Tumarkin 1983.

from ideological and methodological problems,² most of these arguments are not based on the knowledge of the real conditions of the body in the Mausoleum and the procedures to which that body has been subjected.

Drawing a direct parallel between Lenin's body and sacred Christian relics is also ideologically motivated. From this perspective it is a priori assumed that the central goal of preserving and displaying Lenin's body was mass propaganda, and that, more broadly, the functioning of the Soviet system was based on the manipulation of mass consciousness. Such assumptions can be found in the rhetoric of both the critics of the "Soviet regime" and its apologists. A recent example of this point was a statement made by President Putin in December 2012, when he met with a group of his so-called "trusted representatives." A member of the audience asked whether the president shared a popular opinion that it is necessary to bury Lenin's body, because having an unburried corpse in the center of the country violates Russian Christian traditions. Putin's response sounded well prepared. Lenin's body does not violate any traditions, he said. Dead bodies of saints have been publicly displayed in many Orthodox monsteries for centuries, from the Kiev-Pechora monastery in Ukraine and the Pskov-Pechora monastery in Russia to Mount Athos in Greece. The preservation of Lenin's body, in Putin's opinion, does not violate but instead perpetuates that tradition, although the Soviet Communist regime undeniably "used that tradition in its own interests," added the president.3

This statement caused an uproar among different religious and political groups. Father Andrei Kuraev, one of the most outspoken public figures of the Russian Orthodox Church, quickly pointed out that a martyr's body can be considered a sacred relic and displayed for worship only if the site of its burial is associated with miracles.⁴ Since in the case of Lenin's body, continued Kuraev, no miracles have been observed it is erroneous to compare it with a relic. Russian nationalists were outraged with Putin's statement because it compared Orthodox saints with the figures whom nationalists call "the executioners of the Russian people." Because the president made this comparison, stated one nationalist leader, he would certainly lose support from the nationalist "Orthodox and Cossack organizations." Communists also condemned the comparison, stating that Lenin was a materialist, a revolutionary and an enemy of the Church and therefore drawing a parallel between his body and sacred religious symbols is unethical.

² For a critical assessment of these arguments, see Ennker 1997; 2011.

³ Bychkov 2012.

⁴ Ibid.

⁵ Statement made by Dmitry Demushkin, leader of the ultra-nationalist organization "Russians" in an interview to the news agency *Interfax*. See "Natsionalisty vozmushcheny."

⁶ However, Genadii Zyuganov, leader of the CPRF (Communist Party of the Russian Federation), himself made public comparisons between Lenin's body and sacred dead bodies in Russian monasteries even before such a comparison was made by Putin. Explaining his point, Zyuganov also referred to the bodies that can be publicly viewed in Kiev Pechersk Lavra. However, in an attempt to avoid any explicit associations between the body of Lenin and religious saints, Zyuganov mentioned by name only one body – that of Ilya Muromets, whom most Russians recognize as a legendary medieval hero who fought against the Tatar-Mongol yoke, rather than being an Orthodox Saint. See Zyuganov Compares.

In an attempt to calm the storm, Putin's press secretary Dmitry Peskov explained that "[t]he president did not draw any direct parallel between Lenin's body and sacred relics. He only pointed out ... that in every ideology, in every period, in every nation and in every state there exists a nucleus of shared values, which are rooted in general commandments, in universal human values. At any stage in history these universal values become manifested in this or that particular way." In other words, Putin's point, according to his press secretary, was that Lenin's body and Soviet history were both normal, and therefore Lenin's body should not be discussed as good or bad, as a symbol of heroic history or a criminal regime. This body is simply a random historical artifact through which "universal human values" happened to be manifested for certain people in a certain period. Soviet history, therefore, was also a normal part of general human history, and no one has the right to evaluate it according to the canons of the current epoch or a different nation. This is why, according to the president, the only reasonable approach is to leave Lenin's body as it is. When asked whether the government has any plans to bury Lenin's body, the press secretary responded: "At the present moment this question is not on the agenda. It is irrelevant."8

Although there may be different political reasons for comparing relics and Lenin's body, one thing is still clear: contrasting them may indeed shed some light on the nature of Lenin's body from a new perspective. However, to compare these different bodies one has to consider more facts about the actual material condition of their tissues, textures and cells, and the scientific and other considerations to which these bodies are subjected. In the case of Lenin's body any knowledge about its materiality and about the science that developed around the project of preservation has been almost completely hidden from public view and treated as a state secret.⁹ In rare journalistic publications and memoirs of the scientists who worked in the lab¹⁰ this theme tends to be treated with scant detail.

However, while the details of the scientific activities that are focused on Lenin's body have always remained hidden from public view, the very fact that this body is continuously maintained through the efforts of scientists has always been publicly emphasized and discussed. The emphasized role of science in this preservation

⁷ Kommentarii Peskova.

⁸ Ibid.

⁹ The Moscow lab that has been looking after the embalmed Lenin's body for many decades has also permanently embalmed a number of other bodies. The most promiment among them are nine bodies of state leaders: Georgii Dimitrov (Bulgaria, embalmed in 1949), Khorloogiin Choibalsan (Mongolia, 1952), Joseph Stalin (USSR, 1953), Klement Gotwald (Czechoslovakia, 1953), Ho Chi Minh (Vietnam, 1969), Agustinio Neto (Angola, 1979), Linden Forbes Burnham (Guyana 1985), Kim Il-sung (North Korea, 1995), Kim Jong-il (North Korea, 2012). Mao Zedong's body was permanently embalmed by Chinese medics in 1977 without the involvement of Soviet specialists (the political relations between China and the Soviet Union in the 1970s were of course extremely strained).

¹⁰ Such memoirs are very few. The most interesting among them are the two books written by the scientists who worked for many years in the lab and were personally involved in the preservation of Lenin's body. See Lopukhin 1997 and Zbarskii 2000. However, even these books do not describe in detail the actual material condition of Lenin's body or the procedures to which it has been subjected (Lopukhin's book is more detailed on this topic).

is to dispel any possible association of Lenin's body with religious miracles and saintly relics. While some historians have claimed that Lenin's body must have been preserved by the Soviet state to suggest an explicit association with religious miracles,¹¹ this argument disregards the fact that the Soviet government itself actively worked to dispel such associations.

Indeed, in all historical periods many rumors about the nature of this body have circulated among the Soviet population. But these rumors themselves have tended to be not about miracles but about science. One of the more persistent rumors claims that the scientists charged with preserving Lenin's body in fact constructed its wax effigy, which looked uncannily real. This rumor began immediately after Lenin's death and embalming in 1924, and has never completely disappeared, even when repeating it could get one arrested. In the atmosphere of widespread denunciations in the 1930s, a young woman reported to the secret police that her acquaintances, the sister and daughter of the once powerful Felix Dzerzhinski,12 said in a private conversation "that the body lying in the Mausoleum is not Lenin's body but a wax dummy."13 The same rumor about a wax effigy has also been circulating in the Western media. In an attempt to dispel it the Party invited a group of Western journalists to the Mausoleum in the 1930s. American journalist Louis Fischer remembers: Boris Zbarsky, one of the two original embalmers of Lenin, "opened the hermetically sealed glass case ..., tweaked Lenin's nose and turned his head to the right and left." The journalists saw for themselves that "[i]t was not wax. It was Lenin."14

After the collapse of the Soviet Union in the early 1990s, rumors about Lenin's body being a wax effigy were again reignited. In his memoir published in 1998 Ilya Zbarsky, son of Boris Zbarsky and himself a long-time member of the Mausoleum embalming team, felt it necessary to insist: "I worked in the Mausoleum for 18 years¹⁵ and I know for a fact that Lenin's body is in a very good condition ... All sorts of rumors and fabrications according to which this is not Lenin's body but an effigy ... or that nothing but Lenin's face and hands have been successfully preserved, have no foundation in reality." ¹⁶

The persistence of these rumors suggests that even if the body was suspected of being not what the state claimed it was, it was still usually not thought of in religious terms, but in terms of a scientifically manufactured fake.

So, let us attempt to compare Lenin's body with Christian relics. Among Christians the worship of sacred bodies is practiced in the Orthodox and Catholic Churches.

¹¹ Tumarkin 1983.

¹² Director of GPU (State Political Directorate) that later was transformed into KGB.

¹³ Denunciation written by E. Pavlova, quoted in Khinshtein 2010.

¹⁴ Fischer 1964, 675.

¹⁵ From 1934 to 1952.

¹⁶ Zbarsky 1998, 306.

These bodies are called "incorruptible" (in Russian, *netlennye*), suggesting that their biological matter does not decompose. The incorruptibility of a body is often treated as proof of its sacredness. However, when we consider incorruptibility more closely it appears that this concept is not based on any clear or shared criteria. For example, it is not clearly defined what kind of changes can take place in a dead body for it to still be considered "incorruptible." In different historical periods, in different branches of Christianity, in different spheres of religious practice and according to different opinions of the Church authorities, the clergy and lay believers, this concept has been interpreted differently.

In some cases a body is incorruptible if it has not decomposed at all, remaining whole, recognizable, and unchanged. But this is not always the case. According to historian Sergei A. Ivanov, in Byzantine Orthodoxy, which in the early period greatly influenced the Russian Orthodox Church, to be incorruptible a dead body did not necessarily have to be whole. In fact, sacred Christian relics in the Byzantine context were often subjected to dismemberment, and were sometimes divided into hundreds of small pieces. Such fragmentation allowed for the miraculous force of the sacred body to be distributed among many believers. And it did not prevent that body from still being considered *incorruptible*, because as one Byzantine cleric of the 5th century explained, "although the body may be dismembered, grace remains undivided. Even the smallest and minutest [piece] of the relic has the exact same power as the whole body of the martyr..."

In the Christian context discussed above the body was seen as incorruptible – intact and unchanged – because its miraculous force had not changed despite the fact that its material substance had been torn to pieces. In the Middle Ages instead of being carefully dismembered by the clergymen, sacred bodies were often violently torn apart into shreds by crowds of believers. An 11th-century chronicle describes this process: "[o]ne person rushed to tear off a handful of dirty hair from the head of the blessed one, another – a tuft of hair from his beard, and the third – a shred of his old cloak and hood." Is Ivanov calls this practice "graceful dismemberment" because although "the corpse of the recenty deceased saint was torn apart into many small mementos, this was done by a reverent crowd instead of a hostile one." For most participants this act was "the only way to preserve the saint as their personal protector." What made a sacred body "incorruptible" in that context was the presence of "grace" within it. Grace in that context was seen as a

¹⁷ Ivanov 2003, 123.

¹⁸ Ibid., 126-127.

¹⁹ Ibid., 124.

²⁰ Ibid., 129. Although the Byzantine Orthodox Church tended to disapprove of the dismemberment of sacred bodies, that practice remained relatively widespread, and the Church tolerated and even expected it. Even those representatives of the Church who clearly opposed this practice still thought of it not as "a crime but only ... as a sign of backwardness, bad education, overzealousness – in other words, as something generally excusable." Ibid., 128.

unique kind of energy "that was fully and indivisibly present in every piece, however minuscule" of the sacred body's matter.²¹

According to this understanding the amount of sacred energy in every little piece of the body is identical to its amount in the body as a whole. In other words, the sacred body and its every fragment function not as containers of energy but its indexes – they provide one with a direct link to an external source of energy (God), which itself remains always the same and indivisible. However, this theory faced a curious dilemma: if sacred energy is indeed indivisible - because God as its source is indivisible – then how to square this with the fact that the human body is divisible and that one day it would face the process of sacred resurrection? Should the human body remain whole to be resurrected, or can it be resurrected from one little fragment? This dilemma was reflected in the uncertainty with which the Russian Orthodox Church has treated the concept of the incorruptibility of sacred bodies. According to F.B. Uspenskii, in medieval Russia, unlike the Byzantine world, for a body to be considered incorruptible it had to be immutable and indivisible²² – i.e., sacred bodies could not be dismembered. However, this understanding functioned more as an ideological norm, than an actual practice. "This is a real paradox, adds Sergey A. Ivanov, - in principle relics [in Russia] were not supposed to be dismembered, but in practice they were dismembered endlessly!"23

In fact, a similar paradox is also encountered in the Catholic context. And in both cases it is reflected in the ambivalent understanding of the process of resurrection: it is unclear whether a body should be whole or can be divided to experience physical resurrection. Historian Caroline Bynum writes about this ambivalence as reflected in two contradictory arguments that coexisted in the Catholic doctrine. According to one argument, "bodies could be divided (that is, their specific treatment in burial did not matter because God had promised resurrection to all bodies in whatever condition they might be found)"; according to the other argument, bodies "should be buried without disturbance (that is, that because exactly this stuff would rise, it should be kept close to its resurrection condition as long as possible)."²⁴ In Russia the fragmentation of dead bodies was treated with exactly the same ambivalence. While the Russian Church criticized fragmentation in words, in practice it performed fragmentation regularly. As a result, today many Russian churches and monasteries house pieces of the same saints' bodies.²⁵

²¹ Ibid., 129.

²² Uspenski believes that the Russian tradition differed from the Byzantine one because of the influence of the Scandinavian Christianity (and through it Ango-Saxon Christianity) on medieval Rus. According to the Scandinavian tradition, to be incorruptible the body also had to be intact. See Uspenski 2003, 158.

²³ Ivanov 2013.

²⁴ Bynum 1995, 23.

²⁵ For example, although the relics of Saint Matrona of Moscow are kept in Pokrov Monsatery in Moscow, many small fragments of these relics are also scattered around many other Moscow churches (see Sen'chukova 2012).

So, in light of all these ambivalences, the body of a saint could be considered *incorruptible* and *immutable* not only when it was divided into pieces, but also when it experienced other, less dramatic transformations. It was only important that the biological *matter* of that body remained *its own native* matter that had not been subjected to any external contamination or replacement. Even if that biomatter was fragemented, mummified (dried up, stiffened, darkened) or decomposed to bare bones, it could still be considered "incorruptible" and "immutable" on condition that no one added any external materials or substances to it.

The relics of Sergius of Radonezh (*Sergii Radonezhskii*) provide a striking illustration of this point in the context of Russian Orthodoxy. Sergius died in 1392, and in 1422 the Church opened up his remains and designated them "incorruptible," even though by that time they consisted of just bare bones and hair. Sergius was canonized. Another example that we will consider comes from the Catholic conext. Drawing on the Catholic context is helpful here because, on the one hand, as mentioned above, the general understanding of incorruptibility in the Orthodox and Catholic Christianities has been quite similar, and, on the other hand, the Catholic Church has for a long time used scientific examinations of dead bodies to establish the fact of their "sacredness." A Catholic example, therefore, may help us illustrate what may be the "scientific criteria" of incorruptibility.

Consider, for instance, Saint Bernadette, a Catholic nun who died in Central France in 1879 and was canonized by the Catholic Church after several examinations of her body by medical scientists. The first examination was conducted in 1909. 30 years after Bernadette's death. According to the medical report written after the examination Bernadette's body was "absolutely intact." Then, however, the report elaborated what this state of "intactment" meant: it turned out that during the thirty years since Bernadette's death her body had undergone many changes: her nose had "dilated and shrunk," her stomach "had caved in and was taut," and "the whole of the shriveled body [was] rigid and taut in every limb." Medical reports that were issued after the second and third examinations of Bernadette in 1919 and 1925, also stated at first that "the body appeared to be absolutely intact and odorless," "[t]here was no smell of putrefaction and none of those present experienced any discomfort" and "the skeleton [was] complete." But later in the text the reports elaborated that in fact the body "is practically mummified," "[t]he skin has disappeared in some places," "has shriveled," and "has taken on a grayish tinge," and the body's "muscles have atrophied."27 So, while maintaining that Bernadette's body was "incorruptible" the scientists described many transformations that had taken place in it.

In these Orthodox and Catholic examples sacred bodies are understood as "intact" and "incorruptible" if some part of their *matter* (skin, muscles, bones, etc)

²⁶ Ravier 1979.

²⁷ Ibid.

remains original and authentic, even if at the level of *form* these bodies dramatically change and sometimes become completely unrecognizable. Such bodies can be mummified, shrivelled, stiffened up, their skin and muscles can be partially decomposed or completely lost, the volume, weight and color can change beyond recognition, and they can even be fragmented into multiple pieces. In short, "incorruptible" bodies come in different forms – they can be a well-preserved corpse, a completely dried up mummy, a small fragment of a foot or even several whitewashed bones. It is the *biomatter* of the body and not its *form* that plays the decisive role in establishing its incorruptibility. In fact, if one considers the process of natural preservation from a biological point of view, it turns out that certain changes of form in dead bodies may even contribute to the relative immutability of their internal matter – e.g., a mummified, dried up, hardened skin may serve as good "casing" that protects internal flesh and bones from decomposition.

All the above has a direct bearing on our understanding of the body of Lenin in the Mausoleum in Moscow. How incorruptibility is understood in the case of Christian saints is indeed comparable with how it is understood in the case of Lenin's body. However, here the relationship between *biomatter* and *form* is reversed. It is the *form* of Lenin's body that has remained unchanged, while the *biomatter* has experienced multiple constant transformations and substitutions. By the term "form" in the case of Lenin's body we understand a broad and dynamic concept. *Form* here alludes not only to the outside appearance of Lenin's body, the volume of its different parts, and the topography of its visible and invisible surfaces, but also to its physical, chemical, and mechanical properties, such as the suppleness of its tissues, the flexibility of its joints, the internal pressure of its flesh, the calcium balance in its bones and the hydrochloric balance in its skin, its overall weight, color, firmness, etc.

The Soviet project of preserving Lenin's body for eternity in fact means that it is the dynamic *form* of this body that is preserved, while its *biomatter* is constantly changed, manipulated, and supplemented with new, artificial materials. Indeed, in direct contradiction to religious relics, in Lenin's case the preservation of bodily *form* is made possible precisely because the body's *biomatter* constantly changes. This relationship to bodily form makes the project of preserving Lenin's body quite different from most other types of bodily preservation, both natural (ancient bodies that were preserved naturally in permafrost, ice, dry sandy soil, salt, etc.) and artificial (bodies subjected to artificial mummification, temporary or lengthy embalming, cryogenics, plastination, etc.). For example, in the case of temporary embalming (the most widespred method of bodily preservation around the world today) bodies are preserved for a relatively short period, usually for a few days or weeks, before

being burried or cremated.²⁸ In the other types of artificial preservation mentioned above, the main task is to preserve the body's *biomatter* for a long time, and this is usually achieved by means of changing its *form* – that form dries up and changes color (in the case of mummification), stiffens up (in the case of plastination and freezing), and so on. In all these cases the external appearance of the body may be preserved, but its physical, dynamic and mechanical parameters (elasticity, suppleness, weight, flexibility of joints, color, internal cell pressure, etc.) change considerably.

It is important to stress that the work on preserving Lenin's body is not limited to the parts that are *visible* to the public (its head and hands), but is directed at all parts of that body, including all its invisible parts, and all parameters of its dynamic form, including those that cannot be experienced by anyone but a small group of scientists and political leaders. In the words of Professor Vladislav Kozel'tsev, who has worked in the Mausoleum lab for three decades, "every new wrinkle, cavity or protrusion" that appear in any part of the body, are considered to be "defects" that require immediate attention and correction.²⁹ In the case of micro defects, special precision microphotography and other methods of micro control are used. The process of micro correction concerns especially Lenin's face, because even minute fluctuations of the facial relief are easily identified by the human eye, leading to noticeable changes of the physiognomic image. However, the micro and macro changes in other parts of the body are also monitored with a similar degree of precision. This monitoring focuses on processes that go on in the skin (histological analysis), in individual cells (cytological analysis), in muscle tissue, in bones, etc.

Lenin's body is described in the reports of state commissions that regularly inspect it as "static" and "incorruptible" not because it does not change at all, but because various problematic processes that go on in it are constantly monitored, identified, and fixed. Today this complex work is conducted by scientists of a special Labthat was created in 1939, fiteen years after Lenin died and his body was first preserved. Academician Yurii Mikhailovich Lopukhin, for a long time the lab's senior scientist, explains: "We take samples from the places where cuts were performed in the past and study their miscrostructure. Our research shows that multiple changes take place all the time, especially in those tissues that were kept under bad conditions in the past." By "the past" he means the early years of this project, between 1924 and the late 1930s, before the Lab was created.³⁰

An example of such changes is the process of hydrolysis, when lipids from the fat cells in different parts of the body gradually turn into liquids. This process results

²⁸ Lenin's body was also subjected to temporary embalming in January 1924, when it had not yet been decided to preserve that body for eternity. Temporary embalming was conducted by Professor A. I. Abrikosov, a famous Russian and Soviet surgeon and pathologist. The method of temporary embalming formed the embalming method for long-term preservation that was later developed and implemented by Vladimir Vorob'ev and Boris Zbarsky.

²⁹ Kozel'tsev 2009.

³⁰ Lopukhin 2009.

in the outflow of fats from different layers of skin and muscle tissue, which causes noticeable changes in the bodily surface, the appearance of new wrinkles, cavities and skin folds, and so on. Another considerable problem is decalcination – the loss of calcium from bone and cartilage structures. Hydrolysis and decalcination today are the main "illnesses of embalming," says the scientist. Most other serious problems have been long solved – e.g., today there is no trace of mildew or other microorganisms, which used to appear regularly on the body in the past. 31

All old and new problems in different parts of the body are continuously studied and measures for their prophylaxis and treatment are continuously developed.³² This scientific work started during the early years of the project. When the Lab was established in 1939 this work became more systematic and new forms of experimental and fundamental research that is not limited to the work on Lenin's body per se were added to it. After WWII the Lab was expanded further, developing into a large research institute with many laboratories and scientific groups. Between 1939 and 1952, during the period of its expansion, the Lab was directed by Sergei Mardashev (the second director of the Lab after Boris Zbarsky). Mardashev introduced many new areas of scientific research to the work of the Lab. "As a major biochemist [Mardashev] understood better than most the magnitude of the problem caused by the hydrolysis and oxidation of fats that inevitably goes on in fat cells. He identified that problem as being among the most urgent."³³

To treat these and other "illnesses of embalming" the lab scientists have developed many unique methods and materials. One method involves micro injections of chemically neutral materials into various parts of the body in order to correct the shifts in the form and volume of bodily parts caused by hydrolysis. drying or mummification in various small areas - in thigh muscles, in the skin around the armpits, in the face and hands, etc.³⁴ One chemically neutral material for micro-injections that has been designed by the Lab possesses the same physical characteristics as fats (viscosity, the ability to harden under room temperature), but unlike fats it does not undergo hydrolysis. During the years when the Lab was most active, between the 1950s and 1980s, such artificially designed nonbiological materials trimproved considerably. But the first prototypes of various artificial materials that were injected as substitutes for biological fats and for other biological subjstances were developed by the Lab when it was directed by biochemist Boris Zbarsky (who, together with Vladimir Vorob'ev, performed the original long-term embalming of Lenin's body in 1924). In the early 1940s, Zbarsky described this experimental work in the Lab; materials were first developed to treat other "experimental" bodies and then applied to fix defects in Lenin's body:

³¹ Ibid.

³² Lopukhin 1997, 128.

³³ Ibid., 126.

³⁴ From the protocols of embalming the body of Georgi Dimitrov, the leader of the Communist Part of Bulgaria, whose body was preserved by the same Moscow lab (TsMAMLS, Fond 56).

we began our experiments in substituting fat materials that had undergone hydrolysis with inert [artificial] materials with the same physical characteristics as fats. After many experiments we developed a mix of paraffin, glycerine, and carotene with the melting point of 57 degrees Celsius. This mix in liquified form can be injected under the skin, where it quickly hardens into a solid mass that can be easily shaped. After experiments in the lab it became possible to substitute hydrolyzed fats with this new mass. From the chemical point of view this mass is inert and can be preserved without change. We also studied methods for removing pigmentation spots from the skin by swelling [these parts] and applying injections. Two years of experiments in this area produced such good results that they could be applied to fixing defects in Lenin's body.³⁵

"[T]he places of depression or change of volume in the hands and other parts of the body, – continued Zbarsky, – were injected with the mix that we developed as a substitution for the fatty materials that underwent hydrolysis."³⁶ In the case of Lenin's face the work of micro-correction proceeded as follows:

At first, to identify the exact area and volume of the necessary injection we applied our mass, a colored mix of wax and paraffin, to a given place [on the surface of the face] and took a photograph. Changing the outlines and volumes of these patches we compared the photographs with the pictures of Vladimir Ilyich's face during his life and at his deathbed. Only after identifying in this way the exact boundaries and volumes of the necessary injections did we carefully carry them out. As a result of these injections the facial resemblance greatly improved.³⁷

Similar measurements and micro-injections, though less finely calibrated, were applied to other parts of Lenin's body. The task of this work, as mentioned above, is to preserve the body's *dynamic form* – the relief of its surfaces, its volume and the dynamic parameters of its tissues and joints. This artificial materials designed by the Lab must correct not only the outward appearance of Lenin's face or the surface of his whole body, but also the overall *experience* of the body by whoever inspects and handles it – its overall elasticity, flexibility, subtleness, weight, color, etc.

As a result of this work the authentic biomatter of Lenin's body is steadily replaced with new artificial materials. An artifical body is emerging "out of" the authentic body. Although this process of substitution goes on relatively slowly, the very fact that it goes on at all is not seen as a problem by either the Lab scientists or the representatives of State Commissions that regularly inspect the body.³⁸ After one inspection by a State Commission, in November 1943, the People's

³⁵ Doklad zasluzhennogo.

³⁶ Ibid.

³⁷ Ibid.

³⁸ During the Soviet period state commissions inspected Lenin's body every several years. The commissions included 15 to 20 people, leading medics, biochemists, anatomists, and representatives of the party-state leadership.

Commissar of Health Georgii Miterey, a Commission member, turned to Zbarsky for clarification: "So, instead of them [natural fats which have undergone hydrolysis] you insert an artificial mass. Does this mean that after a certain period of time all fats [in the body] will be replaced with a new artificial mass?39 Zbarsky responded affirmatively, and the Commission, satisfied with his response, continued its inspection. These Commissions clearly cared more about preserving all nuances of the dynamic form of Lenin's body than its authentic biomatter. In 1939, when a Commission of Narkomzdrav⁴⁰ was inspecting Lenin's body, its member Alexei Busalov, head of the medical administration of the Kremlin,41 drew the attention of other members of the Commission to several new defects that had appeared on the body: "On the soles and toes there are some signs of mummification. In the pelvic area there are some hints of wrinkling and thinning [of the skin]. They should be photographed and described."42 These defects were located in the parts of the body that were invisible to the public. Surgeon academician Nikolai Burdenko, also a Commission member, pointed out micro changes in other publicly invisible parts of the body: new spots "on the outer side of the left forearm" and "in the lower part of the body, especially in the pelvic area." "I am particularly interested in the origin of these spots," added Burdenko. "They are not located in the places where pressure is applied, which means that they are likely to have appeared due to the [internal] change in the tissues or in the chemical agent, or, perhaps, under the influence of light."43 Commission members also stressed that many characteristics of the dynamic form of the body had been successfully maintained without change. Burdenko pointed out: "It is striking how well the mobility of the joints of the upper limbs is preserved"; "the elasticty of the eyelids is guite impressive."44

After the inspection the Lab scientists worked on developing several new procedures and materials to fix new defects. Three years later, on July 14, 1942, after Lenin's body was transported to Tyumen during the wartime evacuation, it was inspected by a Commission of the Soviet People's Commissars. Most of the defects mentioned during the previous inspection of 1939 had already been fixed, and Burdenko, a member of the Commission, exclaimed: "What remarkable mobility in the shoulder and elbow joints. ... The heels are in excellent shape.

³⁹ Doklad zasluzhennogo.

⁴⁰ People's Commissariat of Health.

⁴¹ Known as "Lechsanupr" – Therapeutic and sanitation administration. It existed between 1928 and 1953, when it was reorganized into the Fourth Directorate of the Ministry of Health of the USSR (Chetvertoe Upravlenie Minzdrava), which later became the Main Directorate of the Ministry of Health (Glavnoe Upravlenie Minzdrava).

⁴² Protokol Zasedaniia Narkomzdrava.

⁴³ Ibid.

⁴⁴ Ibid.

⁴⁵ By late 1939 he had been promoted to the rank of Academician, partly due to his work in the Mausoleum.

Thanks to treatments the spots on the body have disappeared."⁴⁶ Academician Abrikosov added: "I am impressed by the nearly total absence of any wrinkles on the body."⁴⁷

The Commission also observed that the elasticity and firmness of the skin in all parts of the body had been preserved. This result was achieved by applying internal mini-injections and successfully substituting the liquids inside skin cells with new artificial liquids. During the inspection Academician Abrikosov examined the conditions of the skin and under-skin tissues in different parts of the body, and demonstrated "the strength of the hair's fixation on the chest," pointing out that "the hair is held firmly in the skin." Addressing the Commission members, Zbarsky also mentioned that the Lab scientists "have managed to improve considerably the overall condition of the heels, increase their volume and remove their pigmentation." And Burdenko again pointed out how well "the joints and the ligamentous apparatus of the spine in the areas of the neck, wrist, elbow and shoulder joints" were preserved, as a result of which "the head, neck, elbows forearms, and wrists are mobile." The final report of the 1942 Commission read:

The inspection of the body by the Commission on a special table found that the skin color, compared to what we found and registered in the inspection of January 19, 1939, has improved. The spots that appeared at that time on the closed parts of the body are now absent. The elasicity of the tissues and the mobility of big and small joints have improved. Skin folds that were previously observed especially in the areas where limbs bend and in the armpit area, as well as the wrinkles in the corners of the mouth and the eyes, have smoothed out. A slight drying of the eyelids and nose wings that was earlier observed, and some parchment skin on both soles, especially on the heels, have been completely elminated. Weight loss that in 1940–41 reached almost 2 kilos, 50 has been reversed by better saturating the body with the embalming solutions, and the danger of any future drying 51 has been eliminated. The color of the hair and the strength of its insertion in the skin have been maintained. There are no signs of drying, let alone decomposition anywhere. 52

By now the major problems that the Lab originally faced in the past had been solved. However, without constant prophylactic measures they could arise again. These problems concerned first and foremost the hydrolysis of fats, decalcination

⁴⁶ Protokol zasedaniia komissii.

⁴⁷ Ibid.

⁴⁸ Doklad zasluzhennogo.

⁴⁹ Ibid.

⁵⁰ The data on the body's weight fluctuations was provided to the Commission by Lab scientists after the 1939 inspection.

⁵¹ The drying of tissues and the flowing out of liquified fats were the main reasons for the body's weight loss.

⁵² Protokol zasedaniia komissii.

of bones, the appearance of fungi and microorganisms, loss of skin color, loss of volume in different tissues, the appearance of new wrinkles, weight fluctuation, tissue rupture, and the overall drying of different body surfaces. 53 As a prophylactic against these problems, and as another way to conduct regular tests of the body, it has been regularly subjected to the so-called "big procedures." Big procedures happen once every one and a half years and take a couple months to complete. During that period the Mausoleum is closed to visitors. The body is submerged for long periods in baths of different solutions; the first bath, in which the body lies for a month, contains a solution of glycerin, potassium acetate and water. Such long prophylactic treatments started at the very beginning of this project in 1924, but like with all the other procedure they have become more sophisticated over the years. In 1939, Zbarsky for the first time gave a detailed explanation about these procedures to a State Commission: "How long the body spends in the bath depends on the condition of its tissues. The body 'is living,' as it were. We change the length of the time that it spends in the bath and the concentration of the solutions in the bath. On average, we keep it for two to three weeks [in each bath]."54 Today, during these procedures different surfaces of the body and volumes of its tissues are continuously monitored with the help of increasingly more sophisticated equipment and tests. Every time the body is taken out of a bath its tissues and the embalming liquids that remain in the bath are subjected to multiple chemical, biological and physical tests:

to make sure that the body contains no microbes, fungi, viruses, and whole microorganisms, including staphylococcus, streptococcus – there is a long list. The tests are conducted by the best experts in research institutes [not the Lab but different research institutes around Moscow]. If they find some fungus or something else, immediate measures must be taken.

Today, such problems are extremely rare – most microorganisms and fungi have been eradicated from the body, although occasional discoveries are still made. However, the last serious problem of this type happened in the 1940s, when "black mildew" was found on the body. That problem, explains Academician Lopukhin, "was solved with the help of formaldehyde, which has the capacity to bind protein. It binds the proteins of fungi, making them unable to multiply. So everything ends well."55

After the first bath the body is moved to another one with a different solution. Some baths contain embalming liquids, some also contain calcium, which is used to increase the ratio of calcium in the bone structures of the body, to reverse the continuous process of decaclination. In general, maintaining the "calcium balance"

⁵³ Lopukhin 1997, 126.

⁵⁴ Protokol Zasedaniia Narkomzdrava.

⁵⁵ Lopukhin 2009.

and "hydrochloric balance" in the body remains today the most important tasks of the Lab.

As this description suggests, the fact that Lenin's body is preserved means that its physical, dynamic "form" is maintained without change, while its original biomatter is constantly replaced with new artificial materials. Moreover, the longer the body is preserved in this way the more artificial materials it contains. Eventually, all of its matter will be replaced with artificial substances, meaning that the body will evolve into a new artificially constructed object which simultaneously *is* and *is not* Lenin's body – it will remain Lenin's body in form but not in matter.

It follows that in the case of Lenin's body the concept of "incorruptibility" means something diamterically opposite from what it meant in the case of Christian relics. As we saw above, dead bodies are considered "incorruptible" and therefore sacred when their original *biomatter* remains the same, regardless of how dramatic the changes in their *form* are. In the case of Lenin's body, on the contrary, what should remain intact is its bodily *form* (both the visible and the invisible form of the body – its stomach, hips, torso, feet, thighs, armpits, bone structure) and its static and dynamic properties (including volume, weight, color, mobility, flexibility, suppleness, etc.). This task requires constant change of the body's biomatter.

What then is the political, cultural and scientific meaning of this work, and why is it conducted in such extreme secrecy? This meaning cannot be reduced to pure visual propaganda designed to legitimize the political regime in the eyes of the Soviet population. If the body was preserved for that reason alone, the focus would be on a more straightforward and familiar task of maintaining its visible parts (face and hands) and especially its portrait resemblance. It would be superfluous to pay so much painstaking attention to the body's invisible parts, to the mobility of its knees and toes, the strength of the hair on its chest, the skin pigmentation around its armpits and the wrinkles around its pelvis. Since publicly displaying Lenin does not require the work of such extreme complexity and experimentation — a fact that is readily admitted by the Lab scientists— it appears that the meaning of this work goes far beyond the relatively simple task of visual propaganda and has more to do with the deep symbolic structure of the Soviet system.

This meaning is never articulated explicitly. However, how the Lab scientists talk about this project in their own language may help us understand this hidden meaning. Academician Bykov, director of the VILAR Institute under whose auspices the Lab has functioned since the early post-Soviet period, explains that the main attention in this work is paid to maintaining the "anatomical image" of Lenin's body and "any fluctuations from the anatomical image" must be avoided.⁵⁶ This makes

⁵⁶ Mavzolei Lenina snova.

the task different and more complex than preserving a body by using any other known methods, such as mummification, cryogenics, etc., all of which lead to a drammatic change of the anatomical image (the body shrinks, becomes stiff, etc.). It is significant that the concept of the "anatomical image" is borrowed by the Lab from discourse of the art world, where it explicitly links anatomy with art. The anatomical image refers to artistic reproduction that pays close attention to the details of individual anatomy – to the form that muscles, tendons, and skin folds take when the torso is turned, the head is tilted and the arms are raised. From ancient sculpture to Renaissance painting, awareness of the anatomical image has been central to the artistic understanding of the body. Italian artist and teacher Giovanni Civardi stresses that a real artist must know "the value of the clinical study of anatomy. To accurately depict the human form on paper, you need to learn more than the rudimentary principles of drawing, you must also be aware of bone structure, be able to visualize the muscles underneath the skin, and have an understanding of the way they move." 57

We find a similar emphasis on having to study Lenin's "anatomical image" in the work of Soviet artists who specialized in Lenin's image. The famous Soviet scupltor Sergei Merkulov, who created a number of classical representations of Lenin, also focused on the "anatomical image" of the leader in his work. When Merkurov designed a 100-meter-high monument of Lenin at the top of the Palace of the Soviets, a building that was planned in the 1930s but was never built (according to the design, the giant statue's head would house Joseph Stalin's office), he focused on replicating the precisely anatomical image of Lenin's body. First he built a model of the statue using Lenin's naked body as a model, focusing on the precise form of its muscles, skin folds, layers of fat, etc. Sculptor Ernst Neizvestnyi, who knew Merkurov well and witnessed his work on the naked model, remarked that Merkurov "like a serious professional sweated over Lenin's flesh, trying to inhabit the anatomical image of the genius."58 Merkurov's artistic experiments were based on his unique knowledge of Lenin's anatomical image. On January 22, 1924, he closely observed Lenin's dead body lying in Gorki and took death masks of Lenin's head and hands. Later he described that procedure:

The mask is an historical document of extraordinary importance. I must preserve and pass on to future centuries the features of Ilyich on his death bed. I am trying to capture in form the entire head, and I have almost succeeded. The only part that remains uncaptured is a small place where the nape is pressed against the pillow.⁵⁹

Some aspects of the work in the Lenin Lab are related to the work of such artists as Merkurov. The Lab's work is creative, it involves literally *resculpting* Lenin's body,

⁵⁷ Civardi 2001.

⁵⁸ Neizvestnyi 1990, 70.

⁵⁹ Merkurov 2012.

improving it, reconstructing its previous forms. This work quite literally lies between biology and art. One Lab scientist explains:

"[t]he most difficult aspect of this work is the art of maintaining the body without change. This is the hardest task. To solve it one must not only know the basics of anatomy, physical chemistry, and how to maintain the water balance ... One must also possess artistic sense. It is very important. This is why not everyone is capable of doing this work.⁶⁰

...

This work is very interesting, subtle and difficult. Any new wrinkle or depression [on the body] must be fixed. We are talking about tiny dimensions. Some amount of artificial substitutes has to be introduced [in these places], which is quite difficult. One needs experience and an artistic sense to perform this work.⁶¹

Maintaining, reconstructing and improving Lenin's "anatomical image" has been important from the beginning. In January 1924, when Lenin's body was transported from the Gorki estate outside Moscow to the nearby railway station in extremely cold temperatures, "the upper curve of his right ear was severely damaged by frostbite and turned completely black. Later it all had to be covered somehow." This apparently small task took a long time and many experiments to complete, but "eventually it was covered with [specially designed] plastic masses of the same color as the original skin, and the ear was partially reconstructed." Scientists collaborated with artists and sculptors to complete this task. Also in the early years, when the first scientists of the Mausoleum group had not yet accumulated much experience, their work had other problematic results. When in 1924, when Vorobiev and Zbarsky just began their work:

they poured a large amount of gelatine over [Lenin's feet]. But later it turned out that gelatine eventually changes its color to black, and the result did not look so good. Today it is not completely clear why they did this [poured gelatine]. Probably to fix the soles in [the correct] position that they currently have. ... Moreover, they applied gelatine that was hot, making things even worse. Later all these defects had to be fixed and the surfaces had to be rebuilt.⁶⁴

Another problem concerned eyelashes – they had been destroyed during the original embalming procedures, and later scientists worked hard to design methods to fix this problem. It was finally solved after the war:

⁶⁰ Kozel'tsev 2009.

⁶¹ Ibid.

⁶² Lopukhin 2009.

⁶³ Ibid.

⁶⁴ Ibid.

we had a very good histologist⁶⁵ in the Lab. He was buying artificial eyelashes, which were sold in regular [cosmetics] shops. And he managed to slide them under there [under the eyelids], so that there were at least some kind of eyelashes. Without eyelashes it does not look good. ... Besides, in the early years Lenin's eyes were slightly open, but with these artificial eyelashes they could be closed.⁶⁶

Another problem that the scientists had to fix by artistic methods was the surture on Lenin's head. It was left by the incision that was performed during the original autopsy after Lenin's death. The incision was performed "according to a classical method – from one ear to another," explains Lopukhin.⁶⁷ When the autopsy was performed, soon after Lenin's death, there were no plans to preserve Lenin's body for eternity, let alone to publicly display it. Academician Abrikosov, who conducted the autopsy, was not concerned about making the incision invisible. When later Lenin's body was embalmed and displayed in the sarcophagus the surture from the incision became a problem:

From one side the stitching in the surture was quite visible. And it looked very crude. Some solution had to be found, and it was found, of course. First, the original stitching was replaced with invisible stitching. Second, the surture line itself was masked with specially designed plastic masses of the same color as the skin. This made everything quite invisible and added some [necessary] volume to the neck and nape.⁶⁸

Once again artists were consulted to make sure that the color of the plastic is right. As these descriptions illustrate, Lenin's body has never been conserved in a fixed, static, immutable state. On the contrary, the state of the body has always been dynamic: its original biological materials have been continuously replaced or mixed with artificial ones, its defects have been fixed with specially designed plastics and substances, and its body parts have been rebuilt. The only thing that has always stayed the same is the body's form – its surface appearance, shape, flexibility, color, weight, etc. However, for this form to stay "the same" it must be continuously resculpted and recreated.

Explaining this work, Lopukhin refers to Lenin's body as "live sculpture," ⁶⁹ using a phrase that is supposed to sound like an oxymoron. A sculpture cannot be alive, and a dead body cannot be a sculpture. But the contradictory phrase reveals this body's nature. To think of it as "live sculpture" is to stress not only that it is suspended between art and biology, but also that it cannot be accurately characterized as "dead," although it is clearly not "alive" either. In fact, popular speculations about the

⁶⁵ A specialist in the molecular structure of tissues and skins.

⁶⁶ Lopukhin 2009.

⁶⁷ Ibid.

⁶⁸ Ibid.

⁶⁹ Ibid.

supposed Bolshevik plan to "resurrect" Lenin in a distant future are not based on real facts and seem more like a pure speculation.⁷⁰ Lopukhin says with a chuckle, in response to my questions regarding such allegations, that over the decades Lenin's body had been changed beyond any possibility of recreating the biological life within it.⁷¹ This body has no internal organs, heart or brain (all of which were taken out during the autopsy after Lenin's death), and much of its biomatter has been replaced with artificial materials. The flesh that constitutes this body is quite incompatible with the remains about which Fedorov and cosmists spoke.

This body is different and unique. Unlike a corpse it does not decompose, and unlike a mummy its soft tissues and organs do not dry up – it does not lose weight and volume, and its skin does not harden and darken, etc.⁷² "Live sculpture" also stresses the fact that this body is part of a dynamic network of experiments, procedures and inventions that are just as much biological as they are artistic. This body is constantly regenerated and resculpted anew, constantly "carved out" from its previous incarnations. The work of preservation in this case is not an event, but a never-ending process. It is synonymous not with conservation but with cultivation. In this process anatomical pathologists become sculptors, and biology becomes art.

The result of this painstaking biological artistry was not just the preservation of an original, authentic, immutable body, but rather the creation of a new body that has been constantly changing, emerging, gradually becoming different from the original corpse. Does this mean, then, that this body is becoming less and less the body of Lenin, and one day will lose its authentic Lenin identity altogether? In fact, this should not be an automatic conclusion, because *authenticity* does not have to be understood only in terms of the *same* biomatter. In fact, Academician Lopukhin has pointed out in response to my question about the body's authenticity that even in living bodies most cells change every decade or so: "When all your cells become replaced with new ones you do not cease being you. Why should a gradual substitution of individual cells with new ones in the case of Lenin's body be any different?"⁷³

And yet, one still cannot avoid asking: *Whose* body is it? or What *Subject* "inhabits" it? That Subject "was born" at the moment of Lenin's death, when the real Lenin no longer had a voice of his own. At that time the Party leadership, with Stalin emerging as its head, substituted the voice of the "real Lenin" with an artificially constructed figure of "Leninism" – a figure that has been constructed somewhat

⁷⁰ See Tumarkin's claim that the project was inspired by the Russian "cosmist" philosophy of Nikolai Fedorov. Post-Soviet media has also made this claim many times, without providing any substantiation.

⁷¹ Lopukhin 2009.

⁷² Ibid. The Lab scientists often express their irritation over the recent trend in the media to refer to Lenin's body as a "mummy," which, they say, is technically and conceptually wrong.

⁷³ Lopukhin 2009.

differently in different periods of Soviet history, but that has always played the role of representing the foundational and unquestionable truth of the system. One key feature of the Soviet political system has been the fact that *Leninism* could not be questioned by Soviet political discourse, and was always treated as an a priori unquestionable Truth. Every political statement in the Soviet Union had to refer to Leninism for legitimacy. From the mid 1920s to the early 1990s, that figure of Leninism occupied the position of the *sovereign* of Soviet history. It is that figure of sovereign *Leninism* – the figure that is constructed as a dynamic *form* of Lenin's body and not its authentic biomatter – that the Moscow Lab has been maintining and improving for the past ninety years.

References

- Bychkov, S. 2012. Putin i moshchi Lenina. *Moskovskii komsomolets*, December 12. http://www.mk.ru/politics/article/2012/12/11/785670-putin-i-moschi-lenina.html (visited 1 September 2015).
- Bynum C. 1995. Why All the Fuss about the Body? A Medievalist's Perspective. *Critical Inquiry* 22, 1–33.
- Civardi, G. 2001. Drawing the Human Body: An Anatomical Guide. New York: Sterling.
- Doklad zasluzhennogo deiatelia nauki professora B. I. Zbarskogo 29 noiabria 1943 goda. RGASPI, f. 16, op. 2s, papka 5, ed. khr. 54.
- Ennker, B. 1997. Die Anfänge des Leninkults in der Sowjetunion. Köln: Böhlau.
- Ennker, B. 2011. Formirovanie kul'ta Lenina v Sovetskom Soiuze. Moscow: Rossiiskaia politicheskaia entsiklopediia.
- Fischer, L. 1964. The Life of Lenin. New York: Harper & Row.
- Gill, G. 1980. The Soviet Leader Cult: Reflections on the Structure of Leadership in the Soviet Union. *British Journal of Political Science* 10, 167–186.
- Ivanov, S. A. 2003. Blagochectivoe raschlenenie: paradoks pochitaniia moshchei v vizantiiskoi agiografii. In Lidov, A. M. (ed.) *Vostochnokhristianskie relikvii*. Moscow: Tsentr vostochnoevropeiskoi kul'tury. 121–131.
- Ivanov, S. A. 2013, interviewed by Alexei Yurchak.
- Khinshtein, A. 2010. Tainy Lubianki. OLMA Media Grupp.
- Kommentarii Peskova. *Expert Online*, 11 December 2012. http://expert.ru/2012/12/11/kommentarij-peskova/> (visited 1 September 2015).
- Kozel'tsev, V. L. 2009, interviewed by Alexei Yurchak.
- Lopukhin, Yu. M. 1997. Bolezn', smert' i bal'zamirovanie V.I.Lenina. Moscow: Pravda i Mify.
- Lopukhin, Yu. M. 2009, interviewed by Alexei Yurchak.
- Mavzolei Lenina snova otrkoetsia dlia poseshcheniia 9 ianvaria 2007 goda. *Newsru.com*, 25 December 2006. <www.newsru.com/russia/25dec2006/lenin.html> (visited 1 September 2015).
- Merkurov, S. D. 2012. Vospominaniia, pis'ma, stat'i, zametki, suzhdemiia sovremennikov. Moscow: Kremlin Multimedia.

- Natsionalisty vozmushcheny zaiavleniem Putina, sravnivshego moshchi sviatykh s mumiei Lenina. *Natsional'naia sluzba novostei*. 11 December 2012. http://ru-nsn.livejournal.com/2241547.html (visited 1 September 2015).
- Neizvestnyi, E. 1990. Lik-Litso-Lichina. Moscow: Polifakt.
- Protokol zasedaniia komissii, obrazovannoi soglasno rasporiazheniiu SNK SSSR. 14 July 1942. RGASPI, F. 16, op. 2c, papka 5, ed. kr. 54.
- Protokol zasedaniia Narkomzdrava Soiuza SSR po osmotru tela V. I. Lenina. 19 January 1939. RGASPI, F. 16, op. 2, delo 110.
- Ravier, A. 1979. *Bernadette*. London: Collins. http://www.ewtn.com/library/mary/bernbody.htm (visited 1 September 2015).
- Sen'chukova, M. 2012. Blazhennaia Matrona Moskovskaia: gde pokoitsia sviatoi? *Pravoslavie i mir*, 2 May 2012. http://www.pravmir.ru/blazhennaya-matrona-moskovskaya-gde-poklonitsya-svyatoj (visited 1 September 2015).
- Tumarkin, N. 1983. *Lenin Lives! The Lenin Cult in Soviet Russia*. Cambridge, MA: Harvard University Press.
- Uspenski F.B. 2003. Netlennost' moshchei: opyt sopostavitel'nogo analiza grecheskoi, russkoi i skandinavskoi traditsii. In Lidov, A. M. (ed.) *Vostochnokhristianskie relikvii*. Moskva: Tsentr vostochnoevropeiskoi kul'tury. 151–160.
- Zbarsky, I. B. 1998. "Ot Rossii do Rossii (vospominaniia uchenogo)." In Soloukhin, V., Zbarski, I.B. (eds.) *Pod 'kryshei' Mavzoleiia*. Tver': Polina. 306–308.
- Zbarsky, I. B. 2000. Ob"ekt nomer 1. Moscow.
- Zyuganov Compares Lenin's Mummy in the Mausoleum with Ilya Muromets' Remains in the Kiev-Pechora Monastery. *Interfax*, 27 August 2012. <www.interfax.ru/russia/news. asp?id=262354> (visited 1 September 2015).