

Selecting Candidates for De-extinction and Resurrection: Mammoths, Lenin's Tomb and Neo-Eurasianism

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Abstract: *My paper explores links between the human and animal candidates for resurrection and de-extinction and focuses on the aspect of nationalist agenda in application to both species. I explore the intersection between the scientific and symbolic agendas in the resurrection and de-extinction discourse. I interpret the ideological underpinnings of the current developments in the woolly mammoth de-extinction in the Russian Federation in parallel to the theme of resurrection of historically-important personalities in contemporary Russian fiction of magical historicist bent. My particular focus is on the role of Neo-Eurasianist thinking in the choice of the candidates for resurrection and de-extinction, both animal and human. My conclusions are that both animal de-extinction and human resurrection futurity share a proleptic vision of ecological and geopolitical scenarios and that both create taxonomies and hierarchies privileging one kind of species over the other. Due to the constructed exclusivity of selected candidates among species and human groupings this futurity is both informed by and makes a contribution to the quasi-racialist discourse. De-extinction plays into political ideas about race, identity, nationality in a way that might not be suspected. While on the surface the mammoth de-extinction drive appears to be part of the process to restore the ecosystem for the holistic benefit of fauna, flora and humans, the Neo-Eurasianist context gives the project a distinct symbolic meaning. The new mammoth hybrid becomes correlated to the construct of complementary-hybridised Eurasian ethnicities of Siberia.*

Keywords: *nationalism, race, geopolitics, mammoth de-extinction*

'If obligation to the past is a superstition, so is obligation to the future'.

Martin P. Golding. 'Obligations to Future Generations'.¹

'Lenin lives, Lenin will live forever!'

Soviet slogan.

'Mammoth lived, Mammoth will live!'

Komsomol'skaia Pravda, 18 September 2014.

The physical resurrection of extinct animal species is a field of inquiry with increasingly porous borders between science and fiction. While for centuries the de-extinction of animals was the subject of futuristic literary discourse and artistic imagination, in the last few years experimental science has appropriated this territory. The current list of the candidates for animal de-extinction includes such species as woolly mammoths and Neanderthals. Scientists stress that a factor of megafaunal charisma plays an important role in the choice of the candidates that are considered to be worthy of being brought back to life (Slomski 2010, 19). Size of species is one such important factor, but the special symbolic value of the species can play a determining role. Typically, those animals that are considered national mascots and are emblematically linked in public opinion to a particular geographical locale, or nationhood, often score high on the de-extinction list: moa for New Zealand, Tasmanian tigers for Australia, or dodos for Madagascar are examples (Shapiro 2015). These geographical locations and their indigenous peoples, it is often argued, need to be compensated for the harm done to their native environment. Yet some scientists caution that the bias inherent in favouring charismatic animals will create a sort of 'class struggle' among successful and doomed cast-off animals (Ducarme 2013). Charisma can be the result of human decisions unrelated to ecological concerns and sustainability; it thus appears to be a subjective, non-scientific and malleable parameter.

The Neanderthal and the woolly mammoth both died out before the foundation of national states and the emergence of geopolitical maps. While they cannot embody nationhood

my material shows that they have nevertheless been appropriated for nationalistic discourse. My paper explores links between the human and animal candidates for resurrection and focuses on the aspect of nationalist agendas with reference to both these species. I interpret the ideological underpinnings of the current developments in the woolly mammoth de-extinction in the Russian Federation in parallel to the theme of resurrection of historically-important personalities in contemporary Russian fiction of a magical historicist bent.² In so doing, I explore the intersection between the scientific and symbolic agendas in the de-extinction discourse. My particular focus is on the role of Neo-Eurasianism in the choice of the candidates for resurrection and de-extinction, both animal and human. Since the bodies of frozen woolly mammoths are found in the permafrost territory of the Russian Eurasian subcontinent, the unfolding de-extinction narrative must be understood in the context of this powerful Neo-Eurasianist geopolitical ideology. I argue that on the symbolic level the current discourse around the woolly mammoth's de-extinction and motifs of human resurrection and animal cloning in Neo-Eurasianist fiction form an inter-discursive relation (Foucault 1972). They function as Foucauldian discursive formations defined by overlapping and interacting narratives. In his *Archaeology of Knowledge*, Foucault explains how the discursive formation of science is defined with respect to the fields from which it distinguishes itself, such as mysticism or religious doctrine. Yet at various times in history those 'other' domains cross the scientific threshold, and become part of the same discursive formation. Examples in my paper demonstrate that de-extinction and resurrection discourses share the ideological domain with overlapping categories. I close by suggesting that both animal de-extinction and human resurrection futurity share a proleptic vision of ecological and geopolitical scenarios and that these in turn create taxonomies and hierarchies privileging one kind of species over the other. They also by proxy reinterpret the notion of hybridity in both humans and animals. Due to the constructed exclusivity of selected candidates among human and nonhuman groupings this futurity is both informed by and makes a contribution to a quasi-racialist discourse. De-extinction plays into political ideas about race, identity, nationality in a way that might not be suspected.

Peter Singer famously linked speciesism to racism in *Animal Liberation*. The act of privileging the interests of members of one's own 'race' and that of allowing the interests of

one's own species to override the greater interests of members of other species is, in each case, an equivalent pattern of discrimination (Singer 1975). The parallelism between certain animals and racialised national groups played a role in the back-breeding of the aurochs in Germany in the 1930s on the directive from the infamous Nazi Hermann Goering, who wished to recreate the folkloric prey of Roman hunters. Back-breeding is the process that aims 'to bring back traits that used to exist and hopefully still exist somewhere in the genetic pool of living individuals' (Shapiro 102). As was pointed out in the context of biotechnical interventions into animal life, 'the politics and ethics of human-animal relations are more complicated than questions of animal rights or environmental ethics, because non-human animals are implicated in the myriad ways in which we make sense of the world, from gender to nationalism to science' (Dow 2016 148).

What then are the culture-specific aspects in human-animal correlation in Russian reanimation discourse in science and fiction? Since the post-revolutionary 1920s, a very strong link emerged in Russia between scientific experiments on animal reanimation and human immortality, and fiction. The main scientific experiments were done by anabiosis, the method of preservation of species by freezing and then reanimation by thawing, and this found an immediate response in fictional writing (Krementsov 2013). The scientific experiments were either taken seriously by writers or satirised, but in both cases the writing had ideological underpinnings. A group of proletarian poets and writers, the Cosmists-Immortalists, produced a manifesto in which they pronounced death 'ethically impermissible' and resurrection a priority. Well-born writers such as Bulgakov in his 'Heart of a Dog' (1925) and 'Fatal Eggs' (1928) and Alexei Tolstoy in 'Youth Factory' (1928) satirised the experiments of scientists and at the same time polemicised with the writers who embraced the scientific utopia and atheistic ideology (Krementsov 2009, 2013, Mondry 2015). Significantly for the human-animal correlation focus of my investigation, Bulgakov and Tolstoy describe experiments that deal with hybridity³ or involve the application of the same technique of reanimation to both humans and animals: Bulgakov writes about the surgical creation of a human/stray dog hybrid that gets reanimated after a near-death episode, and about chicken and 'fatal' reptile eggs that get mixed up before being subjected to treatment by a mutation-inducing ray. Both stories thus problematise hybridity as monstrosity. Tolstoy describes a reanimation experiment performed on a cat, a dog

and a human for purposes of reanimation and human rejuvenation. While these authors showed that playing God can lead to unpredictable results, for the majority of proponents of resurrection and immortality this issue did not exist, so great was the mass quest to conquer death after the catastrophic losses of life in WWI and the post-Revolutionary Civil War (Krementsov 2013).

Nikolai Fedorov (d. 1903), the author of the highly influential *Philosophy of the Common Task*, did not see a dichotomy between the human efforts to learn methods of resurrection and Christianity's message of resurrection (Masing-Delic 1992). Fedorov taught that through united and collective effort humankind must learn how to scientifically resurrect all the generations of dead by learning how to reanimate the molecules of the dead still preserved in earth. Fedorov saw traditional Russian culture's very reverent attitude towards burial grounds as one manifestation of the importance of preserving dead matter for future resurrection (Hagemeister 1997). The resurrection of past generations of fathers and mothers, he maintained, will be performed by sons and daughters in a scientific-religious response to the correctly understood message of Christianity. It is not fathers or God who have to resurrect the dead, but sons. This scientific-religious Fedorovism underpinned both Russian cosmism and Russian writing of the nationalist orientation during the supposedly internationalist Soviet era. It made a significant comeback in post-Soviet times with a heightened interest in the occult and paranormal science (Glatzer Rosenthal). Significantly, Fedorov's ideas are cited today in relation to the latest animal cloning and genome experiments; in particular, his notion of 'creation of tissue' (*tkanetvorenie*) is viewed as a precursor of contemporary biogenetics (Gacheva 2015).⁴

While current western science's list of candidates for de-extinction includes the Neanderthal, contemporary Russian magical historicist fiction often presents plots about the cloning and resurrection of the country's historical personalities of the past. In this context emerge similarities between the discourses of resurrection and de-extinction. Reports on the new research laboratory for animal de-extinction in the East Siberian city Yakutsk often mention that to bring mammoths back to life is a honourable task because humans were responsible for their extinction. This sense of duty to bring former victims back to life parallels the opinion expressed by a leading writer of magic historicism, Viktor Sharov,⁵ in whose popular novels

Stalin is given a new parenthood, Fedorov himself is a contemporary of Lenin and Trotsky, and all are linked to the experimental projects in genetics and eugenics. In a recent interview Sharov maintained that the only way for him personally as a professional historian to understand how Russian God-fearing people took part in the brotherly war during the Revolution and the Civil War is through the religious-scientific utopianism of the era.⁶ Sharov argued that people killed each other because they believed that they would soon be able to bring those killed back to life ('Shkola zlosloviia' 2016). I suggest that there are reverberations of the notion of Fedorovian Common Task in the popular rhetoric around the animal de-extinction. Scientific evidence in the woolly mammoth de-extinction, however, does not confirm that hunting was the decisive factor in the demise of this species. Notably, Sharov talks about 'brotherly war' and implies that it was Russian Christian people's common task to resurrect their ethnic brothers. This focus on the ethnic composition of human candidates for resurrection has a bearing on the selection of animal candidates for extinction: by analogy it racialises the notion of megafaunal charisma.

Neo-Eurasianism is strongly influenced by this scientific resurrectionist futurism (Young 1997, 2012), and its notion of human brotherhood is not all-inclusive. As a geopolitical theory and mythology, it divides humanity into Eurasianist and Atlanticist civilisations. This division is held to be partly ethnic in its basis and proposes the concept of 'complementary ethnicities'. While maritime trading groups like North Americans, British and Jews form an Atlanticist mentality, Russian and Eurasian groups share a different worldview based on nativist, traditionalist and non-mercantile values. More importantly for the focus of my investigation, Slavic and 'Eurasian' people, it is argued, form non-conflicting complementary ethnicities. In the following I will investigate the nexus of ethnicities and animal species privileged in narratives on human and animal candidates for de-extinction. I use two case studies here: the futuristic novel *The Cruise-liner Joseph Brodsky* (2006) by the Neo-Eurasian writer Aleksandr Prokhanov, and opinions expressed in the media by representatives and followers of the Neo-Eurasian paradigm, especially in relation to the current developments in the project of woolly mammoth de-extinction in the East Siberian Republic, Yakutia-Sakha.

Fighting genetic wars in fiction:

Resurrecting Trotsky, cloning Budennyi and hybridising horses of the Red Cavalry

The Neo-Eurasian novel *The Cruise-liner Joseph Brodsky* thematises the real and literal resurrection of Leon Trotsky, who, in the novel, is Stalin's foe because of his conspiratorial activities in genetics (Mondry 2011). The novel's protagonists fight a genetic war in today's Russia, with the opposing sides consisting of Trotsky's grandson, who is a secret agent of the United States, and members of the Russian Federal Security Bureau. Trotsky's grandson, Slovozaitsev is a genetic engineer and an occultist. He is predictably marked by Semitic (and anti-Semitic) tropes and cultural trappings, and in charge of a secret mission to change the genetic code of the Russian people. The resurrection of Trotsky is motivated by his alleged possession of 'the formula of the great project to genetically transform the Russian people' (523).⁷ In the novel Stalin has to order Trotsky's assassination in Mexico in order to stop his genetic experiments. Trotsky takes the secret of the genome with him to the grave, and this motivates Stalin to transfer his corpse to Russia where he is secretly buried in a Christian monastery. Significantly, the fictionalised Trotsky wants to change the genetic composition of the Russian people during and after the Bolshevik Revolution in order to make them into a proper internationalist community. Stalin – depicted as an Orthodox Christian – then stops Trotsky from changing these Christian Russian people into non-believing internationalists. The stress on the genetic transferability of religious beliefs speaks of the open essentialism of Prokhanov's concept of the Russian people. Moreover, Trotsky's fictional decision to change the genome of Russians is explained by his reaction to the Russian troops' mistrust of him because of his Jewishness. Prokhanov clearly pits Russian ethnicity against Jewish, and in doing so echoes the Neo-Eurasianist notion of ethnic complementarity, according to which Russian ethnicity conflicts with the quintessentially Atlanticist Jewish ethnos.

In the post-Soviet Russia of the 21st century Trotsky's American-educated grandson attempts to resurrect Trotsky in order to find out the secret genome formula to change the ethnic code of the Russian people. Finding Trotsky's grave, he attempts to resurrect him. The scene is marked by a cacophony of Afro- and Native-American magic, Judaic ritual slaughter and scientific experiment:

The Brazilian carnival filled the valley with silk, ribbons, variety dancers, witches from Rio de Janeiro, magicians from the Amazon, sorcerers from the Atlantic coast (*Teplokhod 'Isif Brodskii'* 513).

The 'Atlantic' presence here signals the presence of the Neo-Eurasian concept of Atlanticist civilisation which receives unmistakably racist colouring. In this provocative scene African-American musicians are said to smell like monkeys.⁸ Trotsky's grandson acts as a Judaic priest who ritually slaughters a goat and spills its blood on Trotsky's grave. He then directs his molecular generator to Trotsky's grave. The scene is evocative of the Fedorovian concept of resurrection of dry molecules in the grave. However, the important nuance is that it is not a Russian 'son' who performs the resurrection of his Russian forefather, but a Jew who attempts to use de-extinction technology on his grandfather:

Bones which lay in the depth of the grave started to grow together. Spinal bones started linking together, joints which were ground into flour started to grow together. Still devoid of flesh, the skeleton started to come to life, moved upwards, digging through the grave with a bony arm, waving with bony fingers from under the earth. [...] But the skeleton lacked vital energies, needed for reanimation. The hand having waved, dropped deep into the grave. [...]

Slovozaitsev, a great geneticist and bio-revolutionary [...] grabbed the molecular generator ... He poured the rays over the grave as if it were a flower bed. Various living molecules and life-bearing cells entered the black soil, penetrated through it, and the surface became like glass, resembling a crystal vase in which rainbows were playing. The grave started to swell and was covered by vapour. A mighty ripening took place in it, and one could hear underground rumblings and creaks. (*Teplokhod* 513)

The imagery has strong similarities to Lenin's real tomb where his embalmed body lies in the glass casket in the Mausoleum. Preserved for posterity in 1924, this triumph of Bolshevik science had a great deal of eschatological underpinning. His life-like body, waiting to be woken

up from a long sleep, is in itself a powerful evocation of humanity's dream of waking from the dead as represented in the plot of the fairytale *Sleeping Beauty* (Etkind). Originally, the concept of the embalmed body had a special appeal to simple people as it combined a Christian religious convention of reliquary with the display of secular remains, thus bridging atheistic and scientific worldviews. However, in the context of de-extinction discourse, Lenin's embalmed body, I propose, signifies preservation by scientific method while awaiting further scientific advancements needed to complete the resurrection.

It can be argued that in terms of folk beliefs and in line with the Fedorovian model of the *Philosophy of Common Task*, Lenin's body has to be put into soil in order to be recomposed and reassembled. At present the body undergoes, every eighteen months, a procedure whereby it gets immersed in a glass tub of chemicals containing a mixture of glycerol and potassium acetate. After soaking in the tub for two months the body is removed, wrapped with rubber bandages to prevent leakage, re clothed and returned to public display (Desmond 2002). Paradoxically, in the case of Trotsky's fictional reanimation exercise in the novel, the fact that his body was buried and decomposed increases his chances for resurrection. It can be argued that Prokhanov shows that Jewish conspirators stole the Fedorovian plot, and try to combine it with Atlanticist technologies and scientific achievements. The 'de-extinction' of Trotsky, however, does not succeed. The reason the texts implicitly posit for this is that the power of the prayer of the Russian Orthodox monk is stronger than the combined efforts of Jewish and Amazonian magic and American science. The Atlanticists thus fail to extract the secret formula from Trotsky. The novel implies that the Russian ethnic genetic pool is safe for the time being. Yet the resurrection war is not over: Trotsky's grandson moves Trotsky's body into his secret genetic laboratory situated in the Moscow underground. He also moves from the same grave the bodies of other members of Trotsky's circle who were shot on Stalin's orders, predictably all Jews, to the laboratory where he intends to subject them to the latest techniques of resurrection and where they will rise alive 'as is after the anabiosis' (523). Anabiosis, the 1920s buzzword in the resurrectionary discourse, thus makes a comeback in Prokhanov's contemporary fiction.

At this stage we might ask why Prokhanov has 'the great geneticist' move the bodies out of the soil to the laboratory to complete his task. The answer, I propose, lies again in the

Fedorovian Christian concept of dry molecules found in the native soil of the burial places of forefathers. Stalin's choice of burying Trotsky's and his other Jewish colleagues' bodies in a Russian Christian monastery can be seen as a security measure against the power of unchristian forces. Following this logic, by removing Trotsky and his four collaborators from the Christian ground, 'the great geneticist' increases his chance by isolating them from the territory with active Christian energy, the kind of energy that hinders the resurrection of these enemies of the Russian collective gene-pool.

The science of Prokhanov's human reanimation scheme appears to be as follows: bodies which have been buried in the soil have been de-composed into molecules. Slovozaitsev managed to partially reassemble them by his molecular genetic generator. He then moved them in a frozen state to the laboratory, where yet another secret de-extinction process has the same results as de-freezing or anabiosis. The project is underpinned by Fedorov's notion of resurrection of generations of the dead from the molecules found in soil. What gives the genetic de-extinction political connotations is the notion of a genetic war between the conflicting 'uncomplementary' civilisations, Atlanticist and Eurasian.

This war has a human-animal connection and correlation in terms of genetic manipulations, since it is fought by Americans against Russians also by means of food contamination. The frozen chicken legs that the US exported to Russia in the 1990s find their way into the novel, and allegedly contain special molecular modifiers which attack Russian genes leading to a weakening of the vitality and reproductive abilities of the Russian people. The motif of parallelism in genetic experimentations on humans and animals manifests in the novel in connection with genetic engineering, cloning, de-extinction and hybridity. The current speculative science of woolly mammal de-extinction requires a surrogate donor mother (Shapiro 141-159).⁹ When Prokhanov describes the secret experiments conducted by Trotsky in the 1920s he refers to artificial insemination. These techniques are aimed at cloning such hybrid creatures as centaurs whom Trotsky intends to use in the Red Army. It is at this juncture that Prokhanov's fiction creates an intersection between human and animal cloning and de-extinction. Central to Prokhanov's anxiety around the politics of cloning and de-extinction are the notions of genetic purity and hybridity.

The horse-man centaur that Trotsky succeeds in cloning is named Budennyi which corresponds to the name of the Red Cavalry Marshal and hero of the Russian Revolution and of the Civil War. The historical Trotsky, it must be noted, was a commissar in the Civil War and enjoyed enormous popularity in the Red Army due to his energy and the populist appeal. His status as a Civil War hero, combined with the formidable intellectual abilities expressed in his speeches and writing, made him an object of Stalin's envy. In Prokhanov's magical historicism/scientism, I suggest, Trotsky's creation of horse-men to populate the Red Cavalry is offensive because it is seen as an act of profane misuse of the Russian ethnic genome for human-animal cloning. The notion of human-animal hybridity creates an intersection with cross-ethnic hybridity in the context of the broader genetic war fought today by the great geneticist Slovozaitsev.

To understand this correlation between human and animal hybridity and Neo-Eurasianist complementarity one can refer to the original source of the concept of complementarity, Lev Gumilev's (1912-1992) programmatic *Ethnogenesis and Biosphere of the Earth* (*Etnogenez i biosfera zemli*) (1989). Gumilev puts human-animal correlation into the context of ecosystems and gives an essentialist interpretation of geographies, indigenous people, 'new foreign ethnic invaders', and local fauna. He compares the effect that 'parasitic' ethnicities have on the 'local eco subsystem' to the zoological concept of 'a chimerical construction' and illustrates this by comparison with the effect which tapeworms have on the host animal body. Embedded, however, in this imagery is the notion of hybridity, since the penetrating organism 'alters the biochemistry of the host organism' (Gumilev 1989, 302). Hybridity, by implication, can be complementary or parasitic and conflicting.

This Gumilevian construct has a bearing on the genetic theme in Prokhanov's novel, and it also has implications for the theme of human and animal cloning and de-extinction. Gumilev's theory discursively suggests a moral order to types of hybridity. It suggests that the Russian ethnos links un-problematically with non-Slavic people of Eurasia, and, in doing so proffers a concept of complementary hybridity – a quasi-hybridity which creates a harmonious synthesis. This hybridity can thus be graded into privileged hybridity, or complementary in Neo-Eurasian terminology, or into a compromised, negative hybridity. This reinterpretation of hybridity has

implications for animal cloning and de-extinction. The emergent scheme has distinctly racist underpinnings, based on the transfer of the category of ethnic complementarity across animal species. One construct gives birth to another.

The Asian elephant mother and the woolly mammoth: the Neo-Eurasianist connotations of de-extinction projects

At this stage of my investigation I would like to explore how these quasi-scientific ideas about genetic hybridity, cloning and de-extinction relate to the current discourse around woolly mammoth de-extinction. How does the notion of ethnic complementarity that features in Prokhanov's writing overlap with the narratives around woolly mammoth de-extinction in Russia today? In relation to the current global woolly mammoth de-extinction it was noted that 'as idea and artefact, it can be enrolled to evoke the facts of the deep past but also the promise of the deep future' (Fletcher 95). My aim is to explore what past and whose future this idea and construct signify in the context of concrete, culture-specific discourse, as informed by Neo-Eurasian geopolitics and ideology.

Where Neo-Eurasianism is concerned, a key aspect of the woolly mammoth narrative is the geographical location of the frozen remains of the animals. They are found in the Russian Far North and Far East in the Eurasian continent. This territory is inhabited by Russians as well as people of the East Siberia and Far North, many of whom are defined in Russian geopolitical vocabulary as 'small peoples of the North' (Slezkine 1994). Of special relevance is the fact that Siberian ethnic groups are classified by Neo-Eurasian theorising as complementary to Russian ethnicity (Gumilev 1982). They thus form an integral part of the Eurasian ethnos. In Soviet times these nationalities were patronised by the Russian nationalist discourse (Gumilev and Okladnikov 1982)¹⁰, and during the post-Soviet dismantlement of the Union of Socialist Republics all of these autonomous regions stayed within the Russian Federation. In the 1990s tensions around de-centralisation and drives for greater administrative and economic autonomy from Moscow had to be resolved, especially in cases involving autonomous republics and regions rich in mineral resources such as gold and diamonds. The North East Siberian Republic of

Yakutia-Sakha is the focal place of the mammoth de-extinction project today. It has one of the biggest diamond deposits in the world and the biggest in Russia. In the 1990s its local authorities negotiated better deals from the central government in Moscow. As such this relationship serves as an example of harmonious political and economic co-operation between the centre and the periphery. In the context of Eurasian geopolitics Yakutia as well as all the Russian Far North and Far East regions are of special strategic importance to Russia for developing new economic and political alliances with its South Eastern neighbours. Although the contemporary Eurasian politics of the Russian government is not to be conflated with Neo-Eurasianist ideology, scholars have noted that this ideology contributes to the government's strategies in the region of Eurasia and south of its borders.

Yakutsk as the capital of Yakutia-Sakha houses the biggest collection of woolly mammoth remains in the world. In 2015 the first Russian laboratory for the study of the DNA of extinct species was opened here. Yakutsk has the biggest university in the region, the University of Far East North. This makes Yakutsk a logical place to conduct research around this local species and to develop the field of de-extinction of woolly mammoths. 2015 press reports say that the current animal de-extinction project is based on cooperation between Russian, South Korean and Chinese researchers.¹¹ This includes cooperation with the South Korean research Institute *Sooam Biotech* which specialises in animal cloning. Since well-preserved mammoth bodies have been found in the permafrost territory of Yakutia-Sakha and it is of vital importance for scientific success to use well-preserved animal cells, it makes apparent sense for the local authorities to find their partner institutions in Korea, which is not geographically remote. Additionally, in terms of geopolitics the choice of partner for scientific cooperation in Asia fits Russia's Eurasian geopolitical strategy. Notably, President Putin visited the Yakutsk Research Institute's 'Mammoth museum' in 2013 in the context of the mammoth de-extinction project, named 'Vozrozhdenie mamontov' ('Revival of mammoths').

To re-create woolly mammoths, scientists have to use present day elephants as surrogate mothers (Shapiro 2015). In this way the resurrected animal becomes a hybrid. What are the symbolic implications of this type of hybridity? Notably, the Russian Yakutian-Korean project plans to use Asian elephants as mothers for the DNA extracted from frozen mammoths.

The choice of Asian elephants is partly dictated by their being the closest living animals to Siberian mammoths (Shapiro). When it comes to the symbolic underpinning of scientific projects of animal-de-extinction, the case of the woolly mammoth bears points of resemblance to the Russian cultural narrative of resurrection, especially of the Neo-Eurasianist type. In this context the question of motherhood carries not only biological, but also symbolic and political connotations. De-extinction as procreation becomes a matter of purity and danger, as well as hybridity. The symbolic implications of these notions have been well explored by anthropologists whose research shows that cultures treat hybridity as sites of contamination and subversion (Mary Douglas). Are we to detect more than technical requirements in the choice of the Asian elephant for surrogate motherhood? When American or Canadian scholars refer to the Asian elephant as the most feasible present-day living elephant for mammoth de-extinction in northern America they use it in a different symbolic field from that of Eurasianism, that of the American concept of ‘Wilderness’¹² (Ducarme 4). One and the same animal can carry different, culture-specific meanings. In the case of the current partnership in the Yakutsk mammoth de-extinction project, Russia’s Eurasian geopolitics and Neo-Eurasian notions of complementarity create an intersection. The permanent donor motherhood in animal de-extinction, I propose, can lead to reinterpretation of the notion of hybridity itself. It can, I suggest, lead to the creation of new taxonomies and hierarchies which privilege one kind of hybrid against the Other, animal and, by implication, human. This intersection of animal hybridisation and ethnic human complementarity is where a distinct parallelism occurs in the symbolic correlation between the preservation of endangered animals, de-extinction and the patronising of people of the Far North. While on the surface the mammoth de-extinction drive appears to be part of the process to restore the ecosystem for the holistic benefit of fauna, flora and humans, the Neo-Eurasianist context gives the project a distinct symbolic meaning. The new mammoth hybrid becomes correlated with the construct of complementary-hybridised Eurasian ethnicities of Siberia.

This symbolic field creates a further overlap with the scientific experiments: the fact that the Head of the Korean partner institute, Professor Hwang Woo-Suk, was infamously involved in the claim to have successfully cloned a human embryo only reinforces the parallelism between the human and animal resurrection. While, as is widely reported, Hwang’s institute

today clones dogs on a commercial scale, the behind the scenes work on human cells points to a correlation between scientific experiments on animals and humans.¹³ Moreover, experiments on the use of animal cells for human medicine raise issue of cross-species hybridity. This not only raises the issues of ethics but also further mystifies scientific projects and, in popular imagination, blurs the line between scientific hubris and occult magic. The scientific and symbolic narratives overlap and form a Foucauldian discursive formation.

The mammoth de-extinction project does not function in a cultural vacuum. As a project that deals with death and reanimation of life it forms part of a wider post-Soviet interest in the occult, the esoteric and the paranormal. Prokhanov's fiction illustrates that there is no apparent contradiction between science and the mystical domain: on the contrary, the message is that in the hands of the enemy, the latest technology, genetics and magic ritual form a synthesis (Livers 2010). What constitutes the difference is the right kind of belief. This true belief is essentialised because only selected ethnicities have this 'right faith'. Often, this 'Russian' faith combines elements of Christianity and neo-paganism to reflect the geo-ethnic composition of Eurasia (Laruelle 2011), and, more importantly, to define the ethnic collective by common historical roots that go further down in history than the introduction of Christianity in the region of the Old Rus' in the 9th century. This complex, contradictory and multifaceted phenomenon includes a quest for the holistic relationship between cosmos, 'man' and nature, but is also underpinned by 'the territorialization of ethnicity as one of its political foundations' (Laruelle 2011, 16). The post-Soviet popular interest in the supernatural parallels a rise in conspiracy theories, many of which are used to explain the collapse of the Russian economy as well as various ecological and environmental disasters (Glatzer Rosenthal). The popularity of esoteric movements has both political aetiology and implications. There is a popular belief that Russia is the victim of scientific, technological as well as supernatural manipulations by external conspirators. This belief creates a two-way traffic between societal beliefs and representations in fiction. Neo-Eurasianism is an important contributor to this form of political syncretistic worldview. In this context, the symbolic field of the woolly mammoth de-extinction project intersects with such diverse issues as geopolitics, ethnic identities, ecology and religious and esoteric worldviews.

Whose Human and Animal Revival?

The Yakutsk science institute which handles the woolly mammoth de-extinction project hosts the Mammoths Museum. The museum's display cabinets exhibit woolly mammoths' bodies found in the permafrost. The preservation of these bodies is maintained by keeping them at extremely low temperatures. The context of the museum's proximity to the de-extinction research centre emphasises the connection between preservation and reanimation, in line with the scientific views that the success of de-extinction depends largely on preservation.¹⁴

Moreover, the preserved body displays lay bare the connection between the museum with its animal exhibits and the Lenin mausoleum, thus creating a continuum between animal and human resurrection. This connection is obvious in contemporary Russian society and as such it was reflected in the title of the article on the Yakutsk mammoth de-extinction experiments published in the national newspaper *Komsomol'skaia Pravda*, 18 September 2014: 'Mammoth Lived, Mammoth Will Live!'.¹⁵ This suggestive title is copied from the famous Soviet slogan 'Lenin lives, Lenin will live forever!'. The irony of the title reveals the 'hidden' meaning of preservation of human bodies: that of bringing them back to life. The Russian word chosen for the mammoth de-extinction project is 'Vozrozhdenie mamontov', *vozhrozhdenie* being a polysemous word that includes a range of meanings, from 'revival', 'reanimation' and 'return to life' to the concrete term for the historical era – that of the European Renaissance, *Vozrozhdenie*. It appears to be carefully chosen to distinguish it from a religious 'resurrection' – *voskreshenie*. By choosing this title the de-extinction project positions itself both as a secular and more-than-secular undertaking. As '*Return to life*' this word denotes fuzzy borders between science, technology and mysticism. As 'reanimation' it has a secular meaning. At the same time for a monotheistic religious believer 'return to life' can mean physical resurrection made possible with God's guidance via science in this life, and this is how Fedorov conceptualised his resurrection. For polytheistic or shamanic believers such as those of the native Yakutians, Evenks and Yukagirs respectively, return to life can happen by the will of deities. This fuzziness reflects the way in which animal de-extinction can parallel notions of human resurrection and achievement of immortality in contemporary culture informed by numerous trends of symbiotic worldviews. The 1920s animal reanimation experiments, human rejuvenation and the

embalming of Lenin appealed to advocates of science and religious believers alike. These popular perceptions and scientific initiatives were harmonised by the concrete historical circumstances: the huge losses of life in two wars. Combined with the establishment of the brand new society the turn to futurity required the ability to conquer death and establish paradise on earth. Today, the global interest in mammoth de-extinction is driven by the special appeal which this charismatic megafauna holds in popular imagination. This appeal has been explained by the ‘promissory’ message of biotechnologies that claim to guarantee a better future for humans (Fletcher 95). Yet it is important to remember that the ‘Vozrozhdenie mamontov’ project is located in East Siberia, and this embeds the project also in a local ethno-cultural domain (as well as in regional socio-economic sphere). As such, it becomes part of the bigger (Neo) Eurasian phenomenon.

The presence of the mystical sphere in attitudes to mammoth de-extinction was apparent in interviews with the people of Yakutsk in 2015. Laypersons on the street spoke negatively about the mammoth de-extinction project because they feared that experiments would disturb the dead animals (Macuch 2015). This notion demonstrates the indefinite status of a frozen body as suspended between the states of being dead and alive, or as undead. This state of being frozen and, de facto, preserved by nature also shows that frozen mammoth bodies are perceived as being in their natural state as long as they remain buried in permafrost; it is this state that should not be changed in an unnatural way. Yakutia is considered to be one of the three least religious regions in Russia today. Journalists and documentary makers Macuch and Anderson have also fostered some insight into the views of lay Russians on mammoth de-extinction. The women whom Macuch and Aaronson randomly interviewed did not identify themselves as Christian believers nor did they self-report as possessing a systematic religious opinion. Rather, they expressed a syncretistic popular belief based on the notion of special powers of the dead, be they human or animal.

There is, however, a concrete culture-specific belief in relation to dead mammoths and the domain of human and animal afterlife. The most ancient and endangered people of the arctic Siberia, the Yukagirs, connect the mammoth remains with death, and this belief is reflected in the Yukagir word *Kholgol*, *khol* is the ancient word for the mammoth – *ol* meaning death (Egor

Fedorov). The fact that mammoths' bodies are found in earth explains the belief that the mammoth is a chthonic animal who gets killed by the sun if it attempts to get out onto the surface. For Yukagirs to find mammoth remains was considered a bad omen predicting death. The belief is widely known among the people of the area, and it is reported that elder people do not like to disclose their findings of mammoth remains out of fear of bad luck. These beliefs, however, coincide with the economic necessities for survival, and mammoth ivory mining as well as the recent market for mammoths' bodily remains driven by scientific experiments are the contributing factors to the well-being of this endangered minority. The mammoth de-extinction in this region is a complex continuum which brings together science, mystical beliefs, and survival of endangered people of North Siberia.

This discourse, moreover, relates to the meaning of the word *vozhzhdenie* as synonymous with Renaissance. As such it implies the revival of the whole cultural and environmental ecology of the region, including its indigenous people.¹⁶ In Yakutia today the majority of the population is culturally and linguistically Russified. All 450,000 Yakutians who declared Sakha as their native language are bilingual and speak Russian. Starting from the 7th century Yakutians moved from the south of the river Lena to the territory of the present day Sakha region and pushed the indigenous Yukagirs further north. The latter had to survive in the extreme conditions of the arctic North and developed their own sustainability by deer rearing, fishing and dog breeding. Today there are only 1,600 Yukagirs, and their language, which belongs to Paleo-Siberian group, is on the brink of extinction since only 10% of Yukagirs speak it. It is quite clear that the hypothetical arrival of de-extinct mammoths in the supposedly not distant future is not likely to increase their chance for survival. The same is applicable to Evenks, Evens and other small peoples of the Far North.

When in 2010 the Yukagirs wanted to keep the mammoth body recovered in the region of their habitat, they were offered a deal by the Yakutsk research institute. Initially the local group of Yukagirs wanted to keep the mammoth as a display that might attract tourists to the area. The Institute paid for the mammoth body and moved it to the research centre for scientific experiments. When in 2013 scientists started to study this female mammoth's brain, they called the mammoth Juka. The name was intended to acknowledge the place where the mammoth was

found. Significantly, the name suggests the mammoth's quasi-tribal origins. Implicit in this association is the notion that the experiments on the mammoth Juka are felt to be relevant to the future of the endangered Yukagirs themselves. Yet in spite of the suggested parallelism, the economic dimension to this episode demonstrates that the cultural interests of this endangered minority are of secondary importance to scientific experiments on mammoths. Currently, there is a Pleistocene Park run by the Northeast Science Station of the Russian Academy of Science on the Kolyma River. This park is the most northerly part of the habitat that once was the rich tundra grassland that supported mammoths during the Pleistocene ice age. The plan is to rewild this park with genetically modified elephant-mammoths.¹⁷ However, the plans to recreate the ecological habitat with holistically integrated fauna and flora in the Yakutia-Sakha region show no evidence of feasibility studies which would consider the medium to long-term implications of repopulating the tundra with woolly mammoths in relation to the advantage of local human populations, all of whom are on brink of extinction. The latest paleontological and archaeological findings of faunal remains in Russia's arctic north show that not all 'mammoth graves' are associated with human activities: 'Many concentrations of mammoth bones are believed to be of primary natural origin, resulting from multiple natural deaths of animals' (Putilko et.al. 2016, 2). The fate of mammoths paralleled by the precarious case of endangered nations of the Far North shows both human and animal vulnerability. Eric Santner (2006) wrote about emergence of 'creaturely life', which calls for compassion, at unexpected intersections (29). An intersection between endangered nations and endangered animals exemplifies such life. This life also shares features of what Anat Pick terms creaturely vulnerability (Pick 2011).

Whose vulnerability?

The extinction of mammoths is particularly emblematic of this vulnerability in popular imagination. The image of the mammoth received a specific interpretation in Russia in the first decade of the 21st century when it was used in the All-National Youth Forum 'Seliger-2007' during the government-driven campaign to change the negative demographic of the Russian nation. The Forum had an installation on its grounds of a two metre tall mammoth with a slogan 'Mammoths Became Extinct Because They Stopped Procreating'. Notably, this exhibit was

installed by the Kremlin-sponsored patriotic youth organisation ‘Nashi’ (‘Ours’). Moreover, the mammoth sculpture was placed next to the stylised Russian Orthodox Church. Shall we perceive this proximity as accidental, or as an ironic touch of post-modernist art? The nexus is clearly suggestive of anxiety around Russian ethnicity being at risk. This pairing of the mammoth sculpture and the church creates a hierarchy in the human and animal species as well as in the candidates for de-extinction. The taxonomy is evocative of Prokhanov’s and other magical historicist writing. In the same way as in Prokhanov’s fiction, the genetic war is fought around survival of the Russian ethnicity, the candidates for resurrection are carefully chosen, and the defining factor is their racialised (quasi)ethnicity. In this fiction Trotsky and his circle as enemies of the Russian people are not to be brought back to life. Preference is similarly given to ‘ethnified’ tribal animals. It is not surprising that the mammoth sculpture caught the attention of the Prokhanov-led newspaper *Zavtra* (‘Tomorrow’) where it was fittingly described in Eurasianist terminology as aimed to encourage the *passionarnost*’ of the young generation (Notin 2007), *passionarnost*’ being Gumilev’s term to characterise and measure the fluctuating ability of ‘ethos’ to survive in competitions with other more powerful ‘ethnos’ (Gumilev 1989, 304).

A graphic example of specifically Neo-Eurasianist underpinning in the parallelism between animal and human cloning can be found in a discussion forum in *Zavtra*. The contributors to the forum, under a graphic heading ‘Pig-people and Eurasian clones’ (25.12.2000), discuss the alleged information about cloning by Australian scientists which involves both human and pig organs and cells. One of the discussants suggests that scientific cloning is an ‘Atlanticist enterprise’ which can, however, be opposed by the ‘Eurasian cloning’. This latter cloning will have nothing to do with the animal cloning of the Dolly the sheep variety. Rather, it will be done on Russian people as an alternative to normative sexual procreation. This type of cloning, the author argues, will solve the current demographic crises of the nation and, at the same time, will create a society which will live by the celibate ideals of Russian Christian mystics. Fittingly, these clones from their childhood years will be devoted to the ‘Eurasian cause’ while Russia will at the same time outdo the Atlanticists in what they are supposedly good at – genetic modification. As marginal as this opinion sounds, it nevertheless brings together a number of important issues in the narrative of animal cloning and de-extinction, such as the

blending of science, religion and politics; giving a modern twist to the Fedorovian strongly anti-sexual notion of the common task; and, most importantly, it shows that this narrative is part of the broader concern about the genetic composition and future of the Russian people. The author further warns that Russians will fight like wolves and defend their native habitat of Northern lands. Significantly, in this scenario the North is presented as a habitat of the Russian ethnos ('rod'). This territorialised ethnicity is characteristic of syncretistic beliefs currently in vogue,¹⁸ and, significantly, it also echoes Gumilev's Eurasianist ideas that 'majority of Siberian people became part of Russian superethnos' (1982, 26).

Moreover, in the recent reinvention of the Russian people as the people of the North, Alexander Prokhanov mythologised the tundra in the editorial in *Zavtra* and issued a call to 'conquer the tundra's riches' (7.07.2016, 10). In this article with the romantic title 'People of the Arctic Dream' Prokhanov describes the Russian advance into the Arctic in a characteristic discursive mixture of technological progress and mythopoetic imagery, referring to the place as 'Earth's navel' and the land of ancestral dreams. It is in this white snow-land where the new oil deposits will be found; it is here where the new wave of the nation's '*passionarnost*' will occur. The tundra discourse becomes a paradoxical space of the intersection with nationalistic and quasi-racist discourse. Within it the recreation of the tundra's eco-environment needed for the woolly mammoth de-extinction project is uncannily interspersed with the economic drive for oil and gas exploration. The tundra is mythologised as an ontologically Russian space, yet the aim of this mythology is expanding geography and geology, thus paradoxically increasing Anthropocene intervention in its ecosystem.¹⁹ Crucially, the construct of the (white) Russian people as the people of the North displaces, absorbs and replaces the ethnographic entity of 'the small peoples of the north'.²⁰

The vulnerability of the small peoples of Eurasia's north appears to be of little concern in the context of the unfolding narrative of the mammoth de-extinction. In the study of the role of the north in Neo-Eurasianist imagined geographies and symbolic ethnicities, Edith Clowes demonstrated the ironic absence of any historical personalities from the Asian ethnic groups in the geopolitical writings of the main theorist of this movement today, Aleksandr Dugin. Eurasia,

Clowes notes, has virtually no voices in this theorist's world, while the mythic villains of the West have many voices because it is against them that he defines Russia's territorial alliances.

The majority of the population of the Russian North became assimilated and absorbed into Russian ethnicity as the result of Russian and Soviet colonisation of Siberia. In Neo-Eurasianist fiction and theory alike the genetic survival of the Russian people is imagined as a link between the past and the future. In order to preserve this ethnic entity the writers re-write Russia's past, they create extraordinary 'chimeral' combination and alliances, invent new ancestry and progeny for important historical personalities. The cloned (quasi)mammoth-elephant hybrid is emblematic of this mode of a reinvented and resurrected past that is supposedly constructed for the future.

Notes

¹ Martin P. Golding. 'Obligations to Future Generations'. *Responsibilities to Future Generations: Environmental Ethics*. Ed. Ernest Partridge. New York: Prometheus Books. 1981. 61-73, 72.

² The term 'magical historicism' was coined by Alexander Etkind to define 'the bizarre imagery' that has evolved out of post-Soviet culture's dependency on its past. See Etkind 2009, 632.

³ For scientific experiments hybridizing humans and apes in 1920s see Etkind 2008.

⁴ Fedorov was interested in 'organ therapy' by transplant of animal organs for human rejuvenation as conceived by the French physiologist Broun-Sekar (1817-1894). See N.N. Fedorov. 'Chto takoe dobro?'. *Sochineniia*. Moscow: Mysl'. 1982. 607-614.

⁵ On Sharov see Etkind 2009.

⁶ Interview 'Shkola zlosloviia'. Accessed 5 April 2016.

⁷ Author's Translation.

⁸ Other animal symbolism is employed to denote innate, pagan Slav emblematics, such as a communal meal of the Russian FSB men who eat various parts of the roasted boar assigning each a part of the totemic animal. This neo-pagan symbolism is further reinforced by the oak tree under which the feast takes place. On ethnic stereotypes in the novel see Mondry (2013).

⁹ The mammoth bone cell nuclei could be transferred into elephant eggs and then further transferred to surrogate elephant mothers.

¹⁰ In the discussion on the small peoples of the North, Okladnikov stated: 'There is a direct link between the [nature conservation] Red Book with its names of endangered fauna and flora and the developments in the ethnic history of humanity' (Gumilev i Okladnikov, 1982, 27)

¹¹ Anton Evseev. 'Kogda vernutsia mamonty'. *Expert.ru*. 05.02.2015.

¹² Ducarme notes this in connection with popularity which *Canis lupus* enjoys in northern America. Ducarme 4.

¹³ See a discussion in Shapiro, 93-94.

¹⁴ The view expressed by the Moscow-based scientist from the Russian Academy of Sciences, Aleksei Tikhonov, interview of 2016.

¹⁵ Article with identical title was published in 2007 in patriotic *Soiuznoe veche*. 01. 02. 2007.

¹⁶ The word was used in this way in post-apartheid South Africa in the 1990s. The concept of an African Renaissance had strong liberational connotations of the return to cultural roots, revival of traditional values, as well as liberation from European domination.

¹⁷ Shapiro notes that currently there are no regulatory obstacles to populate this private park with GNOs (genetically modified organisms).

¹⁸ Specifically, the use of the word 'rod' relates to the *Rodoverie*, 'ethnic faith movement' that believes in a concealed wisdom of traditions. See Laruelle, 2011, 1.

¹⁹ Nationalism has been identified as part of the broader energy discourse in Russia today. It combines 'the material-nationalistic energy imagination' with the universalist drive for economic growth and modernisation. It also ties the subject to the territory and the nation via natural resources. See Tynkkenen 2016, 375.

²⁰ The 'Law on guaranteed rights of indigenous small peoples of the Russian Federation' (82-FZ)' (Zakon o garantiakh korennykh malykh narodov Rossiiskoi Federatsii' (82-FZ) submitted to the State Duma in July 2016 has a stipulation which grants privileges not only to indigenous 'ethnic' peoples but also 'other-ethnic neighbours and relatives' who lead traditional life style. In the opinion of Kizhinskii this 'invalidates the main ethnic core of the Law'. See Maxim Kizhinskii. Zakon o garantiakh korennykh malykh narodov Rossiiskoi Federatsii. 12.07.2016. Regnum.ru/news/polit/2108784. Accessed 12.07.2016.

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