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“Diaries of Different Years: Translating Peter Kropotkin’s Correspondence from his Siberian Expedition”

Abstract: Historians of biology have paid a lot of attention to Darwin’s correspondence and notebooks, particularly in relation to the development of his theory of evolution by natural selection. More recently scholars have begun to turn to the work of Peter Kropotkin, who developed a theory of evolution based on mutualism rather than natural selection. Kropotkin’s Siberian diary and letters, however, are only available in Russian. This project is based on my own translation of a collection of these letters that are to date not available to non-Russian speakers.

Introduction to Topic

Charles Darwin is the most recognizable figure in the history of evolution, primarily because of his publication of the *Origin of Species* in 1839. Subsequently, scholars have examined and sought after his notebooks and letters to better understand how he developed his theory, as scholars have more recently required. Yet, the 19th century was full of contradictions and ideologies that separated many in how they viewed evolution. It was possible then to be a Darwinist, but also reject natural selection. Peter Kropotkin, whose diaries and correspondences are the focal points of this study, had an alternative view to popularized Darwinism that centralized around Malthusian doctrine. Through Kropotkin’s eyes the foundation of evolution was not intraspecific competition, although he did see it playing a role, it was the idea of cooperation and mutualism in nature that drove evolution. Kropotkin labored until his death to try to promote this view, attempting to steer society away from the idea that progressive evolution centers on the individual. Mutualism in evolution was such a compelling aspect of his ethos that he even applied it to his political views, founding a communistic anarchism that was based on science and cooperation. In today’s world, modern science has seen a resurgence in ideas

of mutualism and cooperation as they have become incorporated into the modern evolutionary synthesis. For example, in the 1960's, evolutionary biologist William D. Hamilton developed a mathematical model that explained altruism and kin selection in evolutionary processes, that eventually developed into the rule that bear's his name, Hamilton's Rule.¹

Kropotkin has also become of interest to evolutionary history; his ideas are some of the first to support the role of mutualism in evolution, drawing more and more scholars towards his work and teachings. Yet, there has been a lack of attention paid to his diaries and letters when he was in Siberia, where he first began to develop his theory of Mutual Aid. One of the central problems western scholars have dealt with in studying his works is that he was a native Russian. The linguistic challenges in translating his works as well as the long-standing differences between the West and Russia have created multiple hurdles that modern historians have to jump over in order to analyze this development in history. Yet no matter the challenge, it does not take away from the importance of understanding this aspect of our history, and our development as humans in a modern evolutionary mindset.

In the following discussion I will try to bring awareness to the ethos and man that was Peter Kropotkin, hoping to show that his life in pursuit of science is as equally important to those as Charles Darwin, A.R. Wallace, Herbert Spencer, and a host of others who have contributed to evolutionary history. I also attempt to show that his ideas should be examined beyond his biology, as they apply to politics and the nature of modern societies. I do this through an analysis of some of the more recent

¹ Dugatkin, Lee Alan. *The Altruism Equation: Seven Scientists Search for the Origins of Goodness*. Princeton: Princeton University Press, 2006. ix.

historiographical literature on Kropotkin, evolution, mutualism, and politics. Most important to the discussion though is the examination of the diaries and correspondences of Kropotkin in one of the most crucial foundational periods of his life, the half decade that he spent in the wilds of Siberia. These notebooks and correspondences, compiled together under the title *Diaries of Different Years*, have never been translated and are representative of a larger project by Dr. Lee Alan Dugatkin and his team in translating and interpreting Kropotkin's words in what is considered his *Voyage of the Beagle*. Although, like Darwin, these notebooks and letters are at the beginning of Kropotkin's career, they do show that he was developing a foundation for his later ideas, be it the role of mutualism in nature or even more broadly in his ideas of the failure of the centralized state and the need for an anarchist world view.

Comparisons to Darwin

It is well observed that the historical literature on Kropotkin acknowledges the significance the Siberian years played on his development. His stories among the Cossacks and journeys of thousands of miles have been compared to that long ago grand adventure of Darwin on the *HMS Beagle*. Yet these two stories are vastly different on many different levels. For one, the geographic distribution between the two might as well be considered polar opposites. Darwin's time around South America, specifically among the Galapagos Islands, rarely draws similarities to the frigid environment of Eastern Siberia. Although Kropotkin does recall that "Siberia is not the frozen land buried in snow and peopled with exiles only, that it is imagined to be" he does recount later in his autobiography, *Memoirs of A Revolutionist*, "Lying full length in the sledge, as everyone does in Siberia, wrapped in fur blankets, fur inside and fur outside, one does not suffer

much from the cold, even when the temperature is forty or sixty degrees below zero, Fahrenheit.”² Secondly, the conditions on which they were drawn upon were considerably different in that Kropotkin was always in service to the Czar’s army while in Siberia. Darwin, on the other hand, was the gentleman naturalist and companion to captain Robert FitzRoy. The inclusion of this comparison is to show that both were able to pursue their interests in studies of natural science, geology, geography, etc. common among intellectual naturalists before there were laboratories and empirical methods of scientific research, but neither of them could escape the reality that they were a product of culturally diverse environments.

Daniel P. Todes, author of *Darwin’s Malthusian Metaphor and Russian Evolutionary Thought*, draws similar conclusions about Darwin and Kropotkin’s experiences, but more significantly he addresses how they differ by two specific conditions, one physio-geographical, and the other socioeconomic.³ When Darwin wrote *On the Origin of Species* he included a metaphor, “struggle for existence,” that he understood to represent the “complex relations among organisms and between the organism and abiotic factors.”⁴ For Darwin and other prominent British evolutionists the metaphor was common sense. Yet, the reception of his work, and the metaphor, in Russia in the 1860’s was sharply contrasted, forming an anti-Malthusian or non-Malthusian perspective. According to Todes, this common reaction among Russian evolutionists constituted a “national style” in reaction to Darwin.⁵ The use of Malthus’s *Essay on*

²Kropotkin, Peter. *Memoirs of A Revolutionist*. Cambridge, Massachusetts: The Riverside Press, 168,198.

³ Todes, Daniel. "Darwin's Malthusian Metaphor and Russian Evolutionary Thought, 1859-1917." *Chicago Journals on Behalf of the History of Science Society* Vol. 78, no. No. 4 (1987): Accessed October 1, 2015. <http://www.jstor.org>, p. 549.

⁴ Ibid., 537.

⁵ Ibid., 538.

Population, which emphasizes exponential reproductive rates and steady food supplies, is an aspect of Darwin's evolutionary theory that did not translate well into the minds of Russian intellectuals. Although Darwin was widely accepted in Russia, the interpretation of Malthus's doctrine as essential in the struggle for existence weakened Darwin's overall theory in Russian scientific communities. Some, like N. Ia. Danilevskii, a 19th century Russian expert on fisheries and population dynamics, attributed it to Darwin's "inseparability of science from subjective cultural values."⁶ Danilevskii does have an arguable point, but the reality was that the vast expanse of Russia coupled with its feudal social system created intellectuals more inclined towards a mutualistic view of evolution based on their environment rather than the Malthusian view, focused on intraspecific competition caused by overpopulation, that does draw similarities to 19th century English society. Because of these factors, in their environment and government, many Russians, including Kropotkin, formed alternative theories on natural selection and the origin of species. As we begin to examine Peter Kropotkin further it is important to remember this context of the environment and time in which he lived. It helps in understanding that conceptions in the state of nature or science are sometimes not just reflective of the things we observe, but rather, in some cases, reflective of the times, places, and societies from which we come.

Who was Peter Kropotkin?

The following is a biographical note of Peter Kropotkin that highlights the relevant accomplishments he achieved as they relate to the ensuing discussion. From the moment of his birth, Peter Kropotkin was heading for a life of renown. A Russian Prince

⁶ Ibid., 541.

born in a mansion of Moscow 1842, he grew up with the privileges of the titled nobility under a tyrannical despot, Nicholas I.⁷ He was tutored by some of the best, mentoring him on subjects of grammar, mathematics, French, judiciary government, and contemporary writing. His mother died of consumption in April of 1846, years later he found her diaries stored in the families Nikol'skoe estate. Martin Miller retains in his biography of Kropotkin that the two younger brothers both held "a strong feeling of devotion to their mother's memory, although they were too young at the time of her death to remember actual experiences with her."⁸ Peter himself, writes in his autobiography, *Memoirs of a Revolutionist*, "Our whole childhood is irradiated by her memory. How often, in some dark passage, the hand of a servant would touch Alexander or me with a caress; or a peasant woman, on meeting with us in the fields, would ask, "Will you be as good as your mother was?"⁹ Some Scholars point to this moment as the beginning of his anarchist communist ideology he would later develop.

Their father was Aleksei Petrovich Kropotkin, a wealthy bureaucrat whose life was balanced between maintaining a lavish militaristic lifestyle in a tsarist regime with the debts he accumulated at the card table. In Peter's autobiographical *Memoirs of A Revolutionist*, he describes his father as a typical product of the military-bureaucratic ethos common among the aristocrats under Tsar Nicholas I.¹⁰ His father also remarried through a militaristic arrangement to the niece of a powerful commanding officer, a

⁷ Woodcock, George, and Ivan Avakumovic. *The Anarchist Prince*. London: T.V. Boardman & Co. LTD, 1950., 7.

⁸ Miller, Martin A. *Kropotkin*. Chicago, IL: The University of Chicago Press, Ltd., 1976., 7, 16-17.

⁹ Kropotkin, Peter. *Memoirs of A Revolutionist*. Cambridge, Massachusetts: The Riverside Press, 12-13.

¹⁰ Ibid., 9-10.

General Timofieff.¹¹ The elder Kropotkin was rarely available for their upbringing, and their stepmother resented the children other than her own. Peter and Alexander were largely raised by the servants, which lived in the hundreds outside of the Kropotkin family homes and were as close as family. Peter recollects after his mother's death "I do not know what would have become of us if we had not found in our house, among the serf servants, that atmosphere of love which children must have around them."¹²

P. Kropotkin was a bright child and would earn a spot in the Corps of Pages, a combination of a militaristic academy with that of a court institution attached to the imperial household. He wasn't accustomed to this new life though, as he had no interest in the fraternal antics common among his classmates, although, his alienation from them did drive him to read and write more intensely.¹³ He resumed work on his journal, *Vremennik*, corresponded intellectually with his brother on subjects of religion, poetry, and natural science, and even began to frequent an Uncle's house that allowed him his first access to revolutionary literature in the form of Herzen's *Poliarnia Zvezda*, a London based journal containing some of the most outspoken and frank criticisms of Russia at the time.¹⁴ In June 1861, as a senior, Kropotkin was nominated sergeant of the Corps, a privileged position that also served as the *Page de Chambre* to the Emperor. Kropotkin was now required to be a part of court life while serving under Czar Alexander II; the new Emperor succeeding his father Nicholas I after his death in 1855. At first, Kropotkin held the Emperor in high esteem, but eventually he began to lose confidence in

¹¹ Osofsky, Stephen. "A Most Useful Life." In *Peter Kropotkin*. Woodbridge, Connecticut: Twayne Publishers, 1979. 24.

¹² *Ibid.*, 23.

¹³ Miller, Martin A. *Kropotkin*. Chicago, IL: The University of Chicago Press, Ltd., 1976., 7, 23-25.

¹⁴ "and yet it was in this house that I made my first acquaintance with revolutionary literature." "How good it is, so much bitterness free of charge. In it [Herzen's press] one can receive the most exact news of everything that is happening in Russia." *Ibid.*, 28-29.

the ability and authority of the Czar, only to see his vision of potential in the Czar and state authority slowly fade with time.¹⁵ In Kropotkin's *Memoirs*, he had this recollection of the Czar, "He looked straight at me; he became pensive; at last he said, 'Well go; one can be useful everywhere;' and his face took on such an expression of fatigue, such a character of complete surrender, that I thought at once, 'He is a used-up man; he is going to give it all up.'"¹⁶ Historians have studied and considered this as a major turning point in his political ideology, foreshadowing his life as an anarchist agitator.

Destined for a seat among the imperial leaders, whom he already held much contact with, Kropotkin shocked his fellow officers, and father, when he decided upon a military career in the frigid region of Eastern Siberia as an officer of the Amur Cossacks. He envisioned living closer to nature and standing a better chance at implementing social reforms and changes that stemmed from the capital of St. Petersburg. The five years that followed would become monumental in Kropotkin's history, a place where his Anarchist ideology and evolutionary ethics would begin to take hold and remain as foundation for his influential life to come.

Being a member of the Czar's Army, Kropotkin still held responsibilities as an officer stationed in Irkutsk the capital of Eastern Siberia. One of his first tasks was an investigation of the prisons around the Amur region. He studied what literature he could, but ultimately he was unprepared for the appalling conditions he was met with and the possibility his reforms to the prison system might actually be taken seriously. This only fueled his steadily growing conviction that government was a source of the problems in Russia, rather than the solution. A conviction that would grow stronger upon meeting

¹⁵ Ibid., 47.

¹⁶Kropotkin, Peter. *Memoirs of A Revolutionist*. Cambridge, Massachusetts: The Riverside Press. 166-167.

exiled radicals like poet M.L. Mikhailov, who first introduced him to the work of Proudhon.¹⁷

In all of Kropotkin's time in Siberia, there are a total of five major expeditions that he would contribute towards. One involved leading a group of barges to a certain point on the Amur River, and then handing them over. A certain Count Muravióff had annexed this region to Russia when he took control of the "great river whose southern position and fertile lands had for the last two hundred years always attracted the Siberians."¹⁸ Needless to say, this was without the support or the backing of the authorities in St. Petersburg. Under his own volition, Muravióff attempted to take a "strong position for Russia on the Pacific Coast, and to join hands with the United States."¹⁹ The settlements he envisioned were to form a self-supporting chain of 2,500 miles from Chita to the coast, but failed to hold as monsoons and millions of migrating birds threatened crops, and a lack of skill in the convicts and few Cossacks that were to maintain this supply line failed to develop a self supporting livelihood. Food supplies as well as commercial goods had to be shipped every year in barges numbering in the hundreds. Cossacks and civil-service officers were usually placed in charge, as they were trusted in not stealing the supplies. This is where Kropotkin came in as he was in charge of a few barges, but his first experience in the role of navigator was not very successful. After having one of his barges stuck and almost lost, a storm came and almost destroyed nearly a third of the entire shipment. It was decided upon that Kropotkin would row further down the Amur to survey the damage and report back to Chita, while others did

¹⁷ Dugatkin, Lee Alan. *The Prince of Evolution: Peter Kropotkin's Adventures in Science and Politics*. CreateSpace Publications, 2011. 11-12.

¹⁸ Kropotkin, Peter. *Memoirs of A Revolutionist*. Cambridge, Massachusetts: The Riverside Press. 184-185.

¹⁹ Ibid., 184.

their best to attain supplies of grain in Japan while the markets were still open before the coming of winter. All was lost in saving the wreckage of the barges, and Kropotkin made haste in returning to Chita to report on the news. He was then asked to report to St. Petersburg personally to attest what happened, those in Chita believing the authorities in St. Petersburg wouldn't believe the news and would attribute it to thieves and ransacking by the locals, unless coming from an officer who witnessed the occasion and was recognizable among political circles, which P. Kropotkin was. Kropotkin couldn't turn down the opportunity to see his brother, and another journey of 3,200 miles between Irkutsk and N6vgorod began, where he could take the railway straight to St. Petersburg. He wouldn't stay long in St. Petersburg after his initial report, returning back to Irkutsk in the same winter. Yet, this time he returned with a new appointment as the attach6 to the Governor-General of East Siberia for Cossack Affairs.²⁰

In 1864, Kropotkin was presented with an opportunity to make a geographical expedition through Manchuria, which he accepted without hesitation.²¹ His mission was to find a trade route via land across the Chinese-Manchurian territory that jutted north separating southeastern Siberia from the eastern Amur region connected to the Pacific Ocean. Kropotkin's acting skills were on display as he and a band of eleven Cossacks were disguised as merchants travelling across the region, equipped with a convoy of forty horses and two carts full of trading goods. They eventually found their route, detailing and surveying the area, and recounting the memorable experiences they experienced along the way. It was an important journey for Kropotkin as it revealed some unexpected facts for the self-taught geographer. He began to question himself on the structure of the

²⁰ Kropotkin, Peter. *Memoirs of A Revolutionist*. Cambridge, Massachusetts: The Riverside Press. 187-197.

²¹ Woodcock, George, and Ivan Avakumovic. *The Anarchist Prince*. London: T.V. Boardman & Co. LTD, 1950., 67.

Asiatic continent, a precursor to his later geographical work. In all, the expedition was a complete success. After the sale of the horses and what little trading goods they had “the expedition cost a little over two pounds,” equivalent to about four or five dollars.²²

The following autumn, Kropotkin was part of another expedition into Manchurian territory. It was to be a mission of good will and friendship to be delivered to the Chinese-Governor-General. Although the expedition never lived up to its political aspirations (travelling with 25 armed Cossacks and having bad relations to begin with) it was fruitful for its geographical findings as well as the impressions left on him by his first contact with foreigners on their own land. Common among the villages, where interests of national states are forgotten, Kropotkin was moved by their friendliness and natural fellowship among the many people of different races. It was also on this expedition that Kropotkin published his first essay in geography in *Memoirs of the Siberian Geographical Society*, which was later used in planning the Trans-Manchurian railway some thirty years later.²³

Kropotkin continued to look for opportunities to leave the regularities of state management, and would value any opportunity to study nature and life among the wilds of Siberia. He spent considerable time dedicated to geography and studying the structure of the Siberian mountains in his fourth expedition in 1865.²⁴ In his last major expedition, considered to be one of his most beneficial, was a mission to find a traversable path between the Yakútsk and Transbaikália gold mines. In the last four years, explorers of all other expeditions had failed to find a feasible path, citing the difficulty and complications

²² Woodcock, George, and Ivan Avakumovic. *The Anarchist Prince*. London: T.V. Boardman & Co. LTD, 1950. 67-70.

²³ Ibid., 170-171.

²⁴ Ibid., 71.

they had in mapping the ridgelines. So Kropotkin, together with his friend and zoologist Poliakov, a topographer named Maskinski, a Yakut hunter that served as a guide, and ten Cossacks, they transgressed the region in search of a path. Eventually they were successful in finding the route, but the extent to which they found mutual aid and cooperation, so powerful among nature, was a success on its own.²⁵ Years later, in his work *Mutual Aid*, Kropotkin looked back on the experience:

“I recollect myself the impressions produced upon me by the animal world of Siberia when I explored the Vitim regions in the company of so accomplished a zoologist as my friend Poliakov. We were both under the fresh impression of the *Origin of Species*, but we looked vainly for the keen competition between animals of the same species which the reading of Darwin’s work had prepared us to expect... We saw plenty of adaptations for struggling, very often in common, against the adverse circumstances of climate, or against various enemies, and Poliakov wrote many a good page upon the mutual dependency of carnivores, ruminants, and rodents in their geographical distribution; we witnessed numbers of facts of mutual support, especially during the migrations of birds and ruminants; but even in the Amur and Usuri regions, where animal life swarms in abundance, facts of real competition and struggle between higher animals of the same species came very seldom under my notice, though I eagerly searched for them.”²⁶

This idea of mutual aid among animals and humans, outside of government interference, is an idea we will examine further as it relates to his Siberian diaries and correspondences. It serves as a great example for how mutualism began to form in his mind as a youth. For now let’s continue the history of Kropotkin to better place these ideas in the context for which they developed in his life as a whole.

Aside from the five major expeditions that Kropotkin was a part of, there were many smaller expeditions that were influential to his time in Siberia. Some were

²⁵ Dugatkin, Lee Alan. *The Prince of Evolution: Peter Kropotkin's Adventures in Science and Politics*. CreateSpace Publications, 2011. 12.

²⁶ Kropotkin, Petr Alekseevich. *Mutual Aid, a Factor of Evolution*. Boston, Massachusetts: Extending Horizons Books, 1955. 33.

significant in that they contributed to his development of mutualism, while others were less spectacular consisting of long boat rides and what it's like to wait out a monsoon.²⁷

As the end of 1866 approached an incident occurred that altered his life and time in Siberia all together. The Polish insurrection of 1863 had brought a large quantity of Poles to Eastern Siberia, who were then treated brutally and harshly as prisoners. In the winter of 1866, when Peter was in the Vitim region on an expedition, an uprising occurred where many Poles planned on making their way to China across the mountains north of Mongolia. The plan was eventually put to an end by the Czar's army. Five of the men were sentenced to death and others to hard labor for life. This affected Peter greatly, as he reported all that happened during the trials, even having his notes published in St. Petersburg newspapers. Together with his brother Alexander, who was now stationed as a Cossack officer in Irkutsk, they became disillusioned with military life and sought a way out. It took some time and planning to arrange, but ultimately their leave was arranged by 1867. By autumn that same year they would begin new phases of their lives, never to return to the far reaches of Siberia again.

Following his resignation from the military, Kropotkin found his way back to St. Petersburg where he enrolled as a student at St. Petersburg University. His studies centered on physics and mathematics, believing a "thorough training in mathematics is the only solid basis for all subsequent work and thought."²⁸ The next five years were devoted to the study of these sciences, along with geography and some natural science. In 1871 he was presented with an opportunity, a chance to become the secretary of the

²⁷ Woodcock, George, and Ivan Avakumovic. *The Anarchist Prince*. London: T.V. Boardman & Co. LTD, 1950. 74-75.

²⁸ Kropotkin, Peter. *Memoirs of A Revolutionist*. Cambridge, Massachusetts: The Riverside Press. 224.

Russian Geographical Society, which after some thought, he declined. He shifted his focus instead towards the liberation of the peasants, a fight for the social inequality of the working class. Ironically, he felt it necessary to leave Russia to better understand how to succeed in these goals. In his first trip to Western Europe, a visit to Switzerland, he made influential life changing connections with a faction of the International Workingmen's Association, the Jura Federation. It is here, tucked away in the Jura Mountains, where he first met anarchist and French geographer Élisée Reclus. The allies he gained here, coupled with considerable amounts of socialist and anarchist literature, fueled his return to the political struggle internalizing within Russia. His revolutionary actions went full scale, conducting lectures and promoting socialist propaganda, even joining an influential populist group known for radical and revolutionary ideals, the Chaikovsky Circle.²⁹

In 1872, after completing and delivering a paper on the origins of the Ice Age, he was arrested for his activities in popularizing revolutionary socialism among the working class. While in prison he continued to work on his scientific writings, completing his *Investigation of the Ice Age* in 1876.³⁰ Within a years time Kropotkin was able to make his escape from prison and fled to England, where he continued his political and scientific pursuits. In that time he contributed many articles to the journal *Nature* and even corresponded with Reclus on his knowledge of Siberia, contributing to the *Nouvelle Géographie Universelle: La Terre et les Hommes*, a universal geographical guide giving descriptions and analysis of the entire world.³¹ In 1882, he was imprisoned again in France as he was on the rise as a leader in the international anarchist movement.

²⁹ Morris, Brian. Kropotkin: The Politics of Community. Amherst, New York, New York: Humanity Books, an Imprint of Prometheus Books, 2004. 37-38.

³⁰ Borrello, Mark E. *Evolutionary Restraints the Contentious History of Group Selection*. Chicago: University of Chicago Press, 2010. 30.

³¹ Ibid., 31.

Sentenced to five years, but released in 1886, he returned to England to continue working on writings in science, history and politics. For the next thirty years, Kropotkin lived a life of comfy refuge on the British Isle. He maintained an avid socialist and anarchist agenda, socializing with some of the movement's most prominent leaders like Henry Bates, Patrick Geddes and William Morris.³² This is also where he would write a majority of his most influential works like *Mutual Aid* and *Memoirs of A Revolutionist*. Following the October Revolution of 1917, in which the tsarist regime was overthrown in Russia, Kropotkin returned to Russia to end his forty-year exile.

Kropotkin, now in his eighties, struggled to maintain a prominent role in the new regime that the authoritarian Bolsheviks were slowly taking grip of. He eventually moved to Dmitrov, a town thirty miles north of Moscow where he would work on his last, and never completed, work *Ethics* until his death in 1921 due to pneumonia.³³

What are the Notebooks and Correspondences?

Peter Kropotkin's death marked an end to the life of a brilliant writer and scientist. What modern historians are left with are his books, notebooks, and letters. In Siberia, Kropotkin kept a series of nine notebooks that have remained untouched by western scholars. In this essay one of those notebooks will be examined as well as a few of the correspondences he held with his outpost. Kropotkin's last known notebook in Siberia is Notebook No. 9., covering his time in the Amur and Ussuri regions of Southeast Siberia. It is dated from the 23 of August 1865 through December of 1866. Emphasizing Notebook No. 9, as well as correspondences 14 and 23, draws importance for a few reasons. It was in these last few years that Kropotkin began to study and show a

³² Morris, Brian. Kropotkin: The Politics of Community. Amherst, New York, New York: Humanity Books, an Imprint of Prometheus Books, 2004. 40.

³³ Ibid., 41.

fascination with the natural sciences. Much of his time before was dedicated to geographical expeditions and the setbacks he faced in implementing reform in a centralized state. There was also his brother Alexander, who was recently stationed in Irkutsk as a Cossack Officer in 1864. Together they “discussed all the philosophical, scientific, and sociological questions of the day.”³⁴ Around this time was also when Darwin’s *Origin of Species* was to be translated to Russian, although Kropotkin had read it only years before in the English version. The close contact after so many years between the two brothers, and the recent surge of Darwinian evolutionary thought in Russia, sparked an interest in Kropotkin that led to Peter’s first ideas of mutualism in biology and the relation it has to politics and ethics in human society. Despite these early beginnings, it would still be years before Kropotkin would develop a full comprehensive view on mutualism and the significance he saw it having in evolutionary studies and society in general, referring to one of his more famous works, *Mutual Aid*.

Like Darwin, the years observing nature firsthand were crucial in formalizing Kropotkin’s later ideas and works. Not only has Kropotkin expressed this in his autobiography, but many contemporary scholars have noted the period’s importance also.³⁵

What is the significance of these Notebooks and Letters?

Many of the historians who have studied Kropotkin’s theories have also acknowledged the role Siberia played in his development. Brian Morris, Professor

³⁴ Kropotkin, Peter. *Memoirs of A Revolutionist*. Cambridge, Massachusetts: The Riverside Press. 217.

³⁵ Kropotkin, Peter. *Memoirs of A Revolutionist*. Cambridge, Massachusetts: The Riverside Press. 168; Dugatkin, Lee Alan. *The Altruism Equation: Seven Scientists Search for the Origins of Goodness*. Princeton: Princeton University Press, 2006. 20-22.

Emeritus at Goldsmiths College, University of London, who has written extensively on histories and subjects of botany, ecology, and ethnobiology, said in his book *Kropotkin: The Politics of Community* that “The geographical and ethnographic researches that he made on these expeditions formed the foundations of his later scientific writings.”³⁶ Mark Borello, whose work we will continue to discuss further, said in his book *Evolutionary Restraints*, “The Siberian experience played a role in the development of Kropotkin’s ideas about evolution and ecology, just as Darwin’s *Beagle* voyage had done in his.”³⁷ This is an interesting statement by Borello because he draws significance to the Siberian years and compares Darwin’s renowned voyage of the HMS Beagle to Kropotkin’s journeys in Siberia, much like we have seen before. Scholars have long been fascinated by Darwin’s work made on this voyage, much of it spent in South America, where he worked towards an understanding of the origin of species. To some, it might seem absurd to compare Darwin’s voyage to Kropotkin’s Siberian journeys in terms of recognition, but the similarities these men shared in their work, while at the same time different in many aspects, is important to the history of evolution. To show this I again take from Borello, when he states, “Just as Darwin came to doubt the fixity of species, so did Kropotkin, already an evolutionist, become skeptical of the importance of intraspecific competition.”³⁸ This idea led to his view of mutualism as an important level in the process of progressive evolution. Kropotkin’s later work *Mutual Aid*, and much of his other works, are based on the development of his ideas in Siberia. Just as scholars are

³⁶ Morris, Brian. *Kropotkin: The Politics of Community*. Amherst, New York, New York: Humanity Books, an Imprint of Prometheus Books, 2004. 37.

³⁷ Borello, Mark E. *Evolutionary Restraints the Contentious History of Group Selection*. Chicago: University of Chicago Press, 2010. 33.

³⁸ Ibid.

interested in charting Darwin's development through his notes and correspondences, so too are Kropotkin's diaries and letters important in the development of his own theory.

From what modern historians already know on Peter Kropotkin, there is also a mass of information contained within the Russian archives and other sources of Russian literature that remain relatively untouched by western scholars. Since the fall of the Berlin Wall westerners have gained more access to these sources, but it remains only a drop compared to the pools of information available. Even more conflicting is the language barrier between these two worlds. The United States has made available critical language programs that seek to promote the study of certain languages, like Russian, in hopes of improving matters of national security.³⁹ The *Diaries of Different Years*, which are the collection of notebooks and correspondences from this crucial period of Kropotkin's life, are, as one would expect, written in Russian. Just having the ability to find, translate, and interpret the diaries is a rarity. It shows the potential impact that finds like these can have on western scholarship. They are key texts to investigate that non-Russian speakers don't have the privilege of accessing.

In Peter's own account of Siberia, years later in his *Memoirs of a Revolutionist*, "The five years that I spent in Siberia were for me a genuine education in life and human character."⁴⁰ Besides the great lessons that Kropotkin learned in those years, his notebooks and correspondences are a great source of material for those interested in the history of mutualism in biology, geography, and anarchy, but maybe even great life lessons for those reading them. Kropotkin as a youth was fascinated with Alexander von

³⁹ "About CLS - Critical Language Scholarship Program." About CLS - Critical Language Scholarship Program. Accessed December 18, 2015. <http://www.clscholarship.org/about>.

⁴⁰ Kropotkin, Peter. *Memoirs of A Revolutionist*. Cambridge, Massachusetts: The Riverside Press. 168-169.

Humboldt, whose life journeys inspired much of the decisions he himself would make in his life.⁴¹ As I read Kropotkin's diaries, I myself, couldn't help feeling exhilaration with this man of science, at the heart of nature, fearless in his decisions and ability to challenge. My point is that, aside from the historical value of these works, they are valuable as literary inspiration, an aspect unexamined and undervalued when considering the significance of many historical contributions.

When missing pages from Darwin's notebooks were published in 1967, Sandra Herbert followed up in her essay *Darwin, Malthus and Selection* that, "Occasionally in history a matter of interpretation comes to be settled by the addition of new evidence," and that is what happened when it came to the debate over Darwin's reading and interpretation of Malthus.⁴² It has already been established that Kropotkin's work in Siberia is worth investigating. Gaining access, translating and interpreting them makes them even more of a rarity to the history of science. Of course, it is any historian's goal to find evidence that will shed light onto an ongoing debate like Herbert was able to do with Darwin's missing notes, and I am not concluding that Kropotkin's notebooks won't be able to do that, but for this examination, I will present examples supporting the notion that Kropotkin's *Diaries of Different Years* are important to the history of biology and anarchism, but also possibly to geography, in hope that other scholars will see their significance and continue the research into the Siberian diaries of Kropotkin.

Importance as a Source for Geography

Recent work by Federico Ferretti, a historian from the University of Bologna, has suggested in a article submitted to the *Journal of Historical Geography* that the

⁴¹ Kropotkin, Peter. *Memoirs of A Revolutionist*. Cambridge, Massachusetts: The Riverside Press. 66.

⁴² Herbert, Sandra. "Darwin, Malthus, and Selection." *Journal of the History of Biology* 4, no. 1 (1971): 209.

correspondence between Élisée Reclus and Peter Kropotkin serves as a source for the history of geography.⁴³ Specifically, a section of the correspondences between them included the geographical work Kropotkin was apart of while he was in Siberia. They show that Kropotkin's work on the orography of Asia was published in two geographical journals founded by Reclus. Do the notebooks from Siberia also serve as a source for the history of geography since they were the personal notebooks he held during this time? The evidence presented in Notebook No. 9 and the few correspondences, this assumption remains inconclusive. There are no examples presented in the cross-section of this study to make it true, but that does not mean the rest of the notebooks and correspondences couldn't offer any evidence. If other scholars are willing to put in the time and effort to investigate this period piece from Kropotkin's life, then it is possible to find missing pieces to Kropotkin's geographical works that may support it as a source for the history of geography.

Importance as a Source for Anarchy

Kropotkin's political ideas have received no shortage of criticism or examination in both his time and the modern era; his ideas on anarchism are arguably the biggest contribution to the anarchist tradition, perhaps even more than the works of Bakunin and Élisée Reclus.⁴⁴ A major aspect of his anarchist ideology rests on his scientific understanding of nature, and historians like Peter Ryley and Caroline Cahm have led many to the conclusion that this connection is what separated his politics from other forms of socialism, and ultimately why they have remained significant to modern

⁴³ Ferretti, Federico. "The Correspondence between Élisée Reclus and Pëtr Kropotkin as a Source for the History of Geography." *Journal of Historical Geography*: 216.

⁴⁴ Cahm, Caroline. *Kropotkin and the Rise of Revolutionary Anarchism, 1872-1886*. Cambridge: Cambridge University Press, 1989. 1.

political thought. In Peter Ryley's book *Making Another World Possible*, a chapter is dedicated to Kropotkin's rise in anarchist communism with an examination of Kropotkin's views on human nature and their relation to social development. When Kropotkin was younger, he argued that anti-social behavior was the result of a capitalistic society, based on ego and greed, and would have no place in the transformed world. In his later years he refined his approach to show that human institutions are rather reflections of human nature itself, based on an understanding of the process of natural evolution.⁴⁵ "Kropotkin's idea of a future anarchist society is rooted in his theory of history, understood as a process of social evolution analogous to the evolution of species."⁴⁶ Cahm goes even further in explaining the significance of science in Kropotkin's political theory:

"No other leading anarchist either before or since has associated anarchism as closely as Kropotkin did with the development of science...Yet it was the eloquent combination of anarchism with science which, for all its weaknesses, enabled Kropotkin to secure a hearing for anarchist communism in all classes of society as well as to assure it a place in both the intellectual and working class history of the late nineteenth and early twentieth centuries."⁴⁷

Carol Peaker, who shared her works at the international conference on 'Biology, Literature and Culture in the Nineteenth Century' in May of 2004, noted that Kropotkin's anarchism was concerned with the unity of *all* realms of life, sketches out links between Kropotkin's biology, history, social reconstruction, and aesthetics. "I demonstrate that Kropotkin's theory of human sociability and altruism, as expressed in his book *Mutual*

⁴⁵ Ryley, Peter. *Making Another World Possible Anarchism, Anti-capitalism and Ecology in Late 19th and Early 20th Century Britain*. New York, NY: Bloomsbury Academic, 2013. 27-50.

⁴⁶ Ibid.

⁴⁷ Cahm, Caroline. *Kropotkin and the Rise of Revolutionary Anarchism, 1872-1886*. Cambridge: Cambridge University Press, 1989. 11,13.

Aid, a Factor of Evolution, not only provides the basis to his entire theory of anarchism but also lies at the heart of his aesthetics and his literary criticism.”⁴⁸

Despite Kropotkin’s underestimation of “the strength of individual independence in industrial society,” a gratifying effect among some social organizations, both his work *Mutual Aid* and his political ideology survived and would continue to influence subsequent generations.⁴⁹

In 1969, Robert M. Young contended in his essay *Malthus and the Evolutionists* that historians have neglected the sociality of 19th century science. His investigation into Darwin’s reading of Malthus is relevant to not only how historians piece together Darwin’s theoretical development, but to the reception it would have upon social communities.⁵⁰ In Piers Hale’s *New Perspectives on Malthus*, he concludes that, “Young a Marxist scholar, argued that theories of political economy, natural history and natural theology were intimately and inextricably linked.”⁵¹ If this is true, and applies to the development of Darwin theories, then so too should we examine Kropotkin’s theories in light of their social context and the links he makes between science and anarchism. Yet, in Kropotkin’s diaries there seem to be a lack of connection between anything remotely anarchist with an underlying scientific foundation. We must remember that these were the younger, formative, and impressionable years in Kropotkin’s life, it is logical to assume that he didn’t formalize his anarchist ideology in Siberia, but it is in Siberia where he developed those ideas through observation and direct experiences. There is

⁴⁸ Peaker, Carol. "Mutual Aid, a Factor of Peter Kropotkin's Literary Criticism." In *Unmapped Countries: Biological Visions in Nineteenth Century Literature and Culture*, 84. London: Anthem Press, 2005.

⁴⁹ Ryley, Peter. *Making Another World Possible Anarchism, Anti-capitalism and Ecology in Late 19th and Early 20th Century Britain*. New York, NY: Bloomsbury Academic, 2013. 27-50.

⁵⁰ Hale, Piers. "Finding a Place for the Anti-Malthusian Tradition in the Victorian Evolution Debates." In *New Perspectives on Malthus*. Unpublished, 2015. This information comes from an unpublished source directly from the author in a personal communication, October 7, 2015. 10.

⁵¹ Ibid.

evidence of a recurring resentment in Kropotkin's tone towards capitalist tendencies in the cities of Eastern Siberia, throughout sections of his notebooks and correspondences.

In Correspondence 23, given without any date or location, Kropotkin writes:

Here are all the fisheries that facilitate the existence of Ussuri cultivators. I'm not talking about trade, because it is insignificant: people sell two, three sable in petty trade, merchants engaged, not the Cossacks; Trade remains vodka, but it is everywhere, only to the enrichment of a few people at the expense of everyone else.⁵²

Kropotkin also recalls later in his *Memoirs of A Revolutionist*, "Although I did not then formulate my observations in terms borrowed from party struggles, I may say now that I lost in Siberia whatever faith I had cherished before. I was prepared to become an anarchist."⁵³

When investigating the history of anarchism, the Siberian diaries of Peter Kropotkin do serve a purpose. They were the developmental years of one of the foremost international anarchist leaders in the 19th century. His distaste to anything pertaining to capitalism or the centralized state is exemplified in select passages throughout his diaries and correspondences, forewarning of the political anarchist he was to become. They also bring attention to science inquiries as the foundation for his later life ethos, none more important than his views on natural selection and progressive evolution.

Importance as a Source for the History of Mutualism in Biology

Mutual Aid, the title of Kropotkin's book and a key aspect of his evolutionary biology, came to prominence in a clash of ideals between Kropotkin and Thomas Huxley in the English scientific journal *The Nineteenth Century*. From 1888 to 1896, Kropotkin published his views on mutualism in response to Huxley's bleak view on the state of

⁵² Kropotkin, Petr. *Diaries of Different Years*. Moscow: Anakin Introductory Books, 1992. From 1882-1886, a collection of Peter Kropotkin's Notebooks in Siberia. Correspondence 23, 397.

⁵³ Kropotkin, Peter. *Memoirs of A Revolutionist*. Cambridge, Massachusetts: The Riverside Press. 217.

nature. Although Huxley was more reflective of prominent Western attitudes in their interpretation of Darwin's struggle for existence, the period of the late 19th century was not new to the idea of mutualism in nature. In 1880, Kropotkin read in the transactions of the St. Petersburg Naturalist Society a lecture by K. Kessler, the Russian zoologist who introduced him to the concept of Mutual Aid. Yet, Kropotkin's ferocity as a writer mixed with his aggressive response to Huxley's *The Struggle for Existence: A Programme*, popularized the ongoing debate on how evolution progressed through natural selection. It has been a debate that raged on for over a hundred years in scientific circles, exemplifying how important the answer is to understanding the development of humans and animals origins. It was in this journal that Kropotkin laid out his tenets of mutual aid, and was eventually compiled into a book.

From Huxley's perspective, intraspecific competition is what drove the process of natural selection. Kropotkin response was something different, his interpretation of Darwin's theory on the struggle for existence was directed more towards the struggle against nature or among different species. He proposed that progressive evolution does not occur out of intraspecific competition, but through mutual aid and cooperation. He envisioned groups of individuals promoting the evolution of species, alternative to individuals of the fittest nature as the driving force behind progressive evolution. Kropotkin even tried to salvage the majority of Darwin's theories, but in doing so had to scrap Malthus and implement mutual aid.⁵⁴

Lee Dugatkin, a Professor of Biology from the University of Louisville, has also done extensive work on both Peter Kropotkin and Mutualism in the history of biology.

⁵⁴ Dugatkin, Lee Alan. *The Prince of Evolution: Peter Kropotkin's Adventures in Science and Politics*. CreateSpace Publications, 2011. 23.

One of his earlier publications, *Cooperation Among Animals* (1997), is a comprehensive analysis of cooperation, its development, and its place in evolutionary history, sighting works by prominent biologists and scientists studying animal social behavior and including empirical research on cooperation in nature. In the first few chapters of his book he uses Kropotkin to set the historical context for the remainder of his research, describing him as an ‘ardent naturalist’ and a ‘fascinating character in the history of biology.’⁵⁵ Though Kropotkin lacked an experimental science common to more contemporary historians and scientists studying cooperation, Dugatkin still suggests that Kropotkin’s *Mutual Aid* was one of the most influential pieces of literature to affect biologists, social scientists and common readers alike.⁵⁶ Is there any evidence of mutualism in the development of the notebooks and correspondences? More yet, does Kropotkin begin to make the connections between biology and mutualism in his notebooks of Siberia, years before his major literary developments and contributions to science as expressed by Dugatkin? To answer these questions, let us look at examples from the notebooks:

26 September 1866

To what extent is the warm climate a wonderful enforcement? Now, only 10 o'clock in the morning, and so warm that coat is enough, and how to sit, on a horse in coat is hot.

[Later entry that same day]

And why was such a storm? In the morning I was still admiring the weather: light cirrus clouds on a completely clear sky, the warmth, the sheet will not move. What would be better?⁵⁷

⁵⁵ Dugatkin, Lee Alan. *Cooperation among Animals an Evolutionary Perspective*. New York: Oxford University Press, 1997. 7.

⁵⁶ Dugatkin, Lee Alan. *Cooperation among Animals an Evolutionary Perspective*. New York: Oxford University Press, 1997. 8.

⁵⁷ Kropotkin, Petr. *Diaries of Different Years*. Moscow: Anakin Introductory Books, 1992. From 1882-1886, a collection of Peter Kropotkin's Notebooks in Siberia. Notebook 9, 254-255.

Here we see that Kropotkin was experiencing first hand the struggles against nature that he so vehemently promoted in his theory of mutual aid. With the *Origin of Species* so fresh in his mind during this period in Siberia, he was not witnessing species struggling against each other, which should be at its highest levels in the harsh environment, but the struggle against the environment. In another example from the translations:

26 October 1866

The horses are shaking, standing in the snow, do not dare to move; they dug up the snow, and they were cordial and did not move. Crackers, bread they were given, do not eat; in the morning so they did eat. Then, on the ridge. happiness is a very gentle ascent, though the crew rises. But the descent! Like the one that comes with the climb after Aliberovskogo mine. If you sit, the driver, of course, is on foot. But there again the thicket, heavy snow. Fortunately, an old man last fall coursed and went through, otherwise we would have definitely gone down the wrong pillow, there is no will.⁵⁸

In this example, although it is hard to gather because these are Kropotkin's own personal notebooks written in shorthand, we see again the struggle against the environment as necessary in his mind. If not for an elder man who descended a certain slope a time before, Kropotkin and his crew might have succumbed to their death. These seem to be direct influences of the environment that resulted in mutualistic cooperation between species. From Kropotkin's perspective this had to be the driving force of evolution. Let's examine another example from the notebook:

22 October 1866

Days go by, and I was again in Pompeevka. We drove away yesterday, blizzard, sitting in the booth in the hope that it would die down by morning.

Today again the same story. It is necessary to go in the snow all day, spend the night in front of the ridge under the blizzard, and if this keeps up, then wait for another day ... or go back.

We are back. Snow does not cease.

⁵⁸ Kropotkin, Petr. *Diaries of Different Years*. Moscow: Anakin Introductory Books, 1992. From 1882-1886, a collection of Peter Kropotkin's Notebooks in Siberia. Notebook 9, 262-263.

In Polikarpovku, Peshoi went jogging in the day, the day of the return. That day a tiger ate a horse. Last year, they killed, or rather wounded one, but it was lost about in the wintering.⁵⁹

Once again it is easy to emphasize the struggle with nature that Kropotkin saw in his years in Siberia. These instances had a major effect on how he interpreted the *Origin of Species* as well as how he formulated his own ideas. Let's continue:

28 September 1866

Nearly twice the empty boat sinking. Twice we went on shore to dry, once barely escaped into the bushes, flooded the boat in all, I did not have time to cast a large cup of water. If it had not happened (the first time) 15 yards from the spot where we are particularly strong, things would not have saved themselves, maybe...overwhelmed, soon, however, turned down and had go into the bushes. Had to wait for the night, the night was quiet, *survived*.⁶⁰

Ending on the word *survived* has a profound effect on this reading of Kropotkin's notebook. Him and his men were struggling against nature and the cooperation shared between them was perhaps the direct influence he needed to believe mutualism is the underlying basis for how groups of species survive and evolve.

In another more recent work from Dugatkin, *The Altruism Equation*, presents a development in the history of blood kinship and the origin of altruism. "So in essence a theory on altruism is a theory on goodness," a line by Dugatkin, whose motivations lie in discovering and understanding how altruism developed historically as well as how biological theories developed to explain them.⁶¹

The historian Mark Borrello, who has written on Darwin's evolution and alternatives alike, examines group selection, it's idea, and how it changed through the 21st

⁵⁹ Kropotkin, Petr. *Diaries of Different Years*. Moscow: Anakin Introductory Books, 1992. From 1882-1886, a collection of Peter Kropotkin's Notebooks in Siberia. Notebook 9, 261-262.

⁶⁰ Kropotkin, Petr. *Diaries of Different Years*. Moscow: Anakin Introductory Books, 1992. From 1882-1886, a collection of Peter Kropotkin's Notebooks in Siberia. Notebook 9, 256.

⁶¹ Dugatkin, Lee Alan. *The Altruism Equation: Seven Scientists Search for the Origins of Goodness*. Princeton: Princeton University Press, 2006. ix.

century in his book *Evolutionary Restraints*. In his chapter on Kropotkin he not only places Kropotkin as a central figure in the gap between 20th and 21st century evolutionary thinkers, he defends Kropotkin as a source for the history of biology. When Joel Schwartz characterized Kropotkin as “purely an amateur naturalist” in a recent article of the *Journal of the History of Biology*, Borrello responded, revealing that Western scholars view Kropotkin in light of his political achievements and downplay his contributions to the history of science.⁶² Like many other scholars, Borrello has likened Kropotkin’s Siberian journey as a youth to Darwin’s renowned voyage of the *Beagle*, and just as important as that journey had done for Darwin and his ideas on the fixity of species, Kropotkin’s journey was equally important to the formation of his ideas on mutual aid and his skepticism of intraspecific competition.⁶³

In Chapter two, Borrello discusses some of the factors that are part of the discussion on the evolution of social insects, which was a popular dilemma in the late 19th century. Why are the social insects willing to give their lives for the colony? These actions seem to be in direct conflict with interpretations of Darwin as well as conflicting Darwin himself. Borrello’s review of “On Social insects and Evolution” and “Social Insects from Psychical and Evolution Points of View,” two reports by Charles V. Riley, a biologist at the University of Washington, presents the argument on the “high degree of development of the five senses in insects and offered evidence of insect intelligence as well as the possibility of telepathy as important factors in their psychical evolution.”⁶⁴ Riley moves his argument further when he suggests that the time is now for considering

⁶² Borrello, Mark E. *Evolutionary Restraints the Contentious History of Group Selection*. Chicago: University of Chicago Press, 2010. 30.

⁶³ Ibid., 33.

⁶⁴ Ibid., 26-27.

animal intelligence in roles of evolution and, taking from Borrello, “Resistance to the idea was evidence of intellectual sluggishness and human pride.”⁶⁵ For Riley, discussions of animal intelligence and the existence of morality in nature are integral to the idea of group selection in the 19th century. It seems that Riley’s perception of evolution, both physical and psychical, includes both Lamarckian and Darwinian concepts, as suggested by Borello and is comparable to the theories Kropotkin would develop himself.⁶⁶

Now did Kropotkin have anything to say directly on acts of altruism or cooperation. In fact he did, in his last entry in his notebook No. 9 he discusses altruism, possibly in reflection of his journeys and expeditions he experienced within the past few years:

Petersburg 1867 November.

There is a certain degree of altruism, mandatory for all, but there are limits beyond which it becomes binding, but only commendable. So, be sure to limit the prosecution of any of their personal purposes outside of where they are compatible with the essential interests of others. What is beyond, will determine the ethics and retain these individuals within and aggregation of individuals is a matter of punishment and censure. If, in addition to this, people do benefit others through direct object of his selfless efforts, for his personal satisfaction, even innocent - that they deserve appreciation and respect, and are the subject of moral exaltation. However, until some external force does not encourage people to such behavior, it is not too often seen, but in any case a necessary condition of egoist spontaneity, since the concept of the welfare of all, achieved through self-sacrifice each is contradicting himself, unless really takes selflessness meaning of sacrifice. Such spontaneity does not preclude the sympathetic encouragement, but it is encouraging to be composed to make sacrifices pleasing, rather than to represent all else worthy of punishment.⁶⁷

⁶⁵ Ibid., 27.

⁶⁶ Ibid.

⁶⁷ Kropotkin, Petr. *Diaries of Different Years*. Moscow: Anakin Introductory Books, 1992. From 1882-1886, a collection of Peter Kropotkin's Notebooks in Siberia. Notebook 9, 266-267.

We see here that Kropotkin was contemplating the idea of altruism as early as 1867, just after his time in Siberia came to an end. Now it doesn't reflect the tenets proposed in his famous work *Mutual Aid* but it does seem to be the beginning of his thought process in developing it. Perhaps it just took a famous Englishman, T.H. Huxley, to push him over the edge, years later, to formally lay down what he so obviously claimed to have observed while he was in Siberia.

In the last example supporting the notion that the Siberian notebooks do serve as a source for the history of biology, we are presented with a discussion of love:

Irkutsk. November 1866

The man has the capacity to love; known in years, this ability becomes a necessity. How to love? Always loved and always varied. Love, which I know from novels to be the case in reality, is not enough, now sometimes manifested and sometimes ending with a very tragic, I do not understand, - too romantic.

It is this that need to be together or even in the short relations I call love. If this is added to the sex drive, the love will be even stronger. Is such a case? Of course. The examples are not enough - there is not even necessary equality in education, to excite a feeling: enough to what I described, it would be at least in part - at least in some area was similar. Can not just come together as a physicist with a physician - in both the science - but also a politician with a scientist, botanist with the tramp armchair mathematician, etc.⁶⁸

In a recent book, *The Prince of Evolution*, Lee Dugatkin discusses the concept of love and how the emotionally laden term drew Kropotkin away from using it as a way to describe cooperative behavior. Kropotkin attributed such actions to the continual action of mutual aid, which he found to be "infinitely wider than love or personal sympathy-an instinct that has been slowly developed among animals and men in the course of an extremely long evolution."⁶⁹ The connections between altruism, mutualism, and biology in Kropotkin's works are evident, especially so when they come to the Siberian diaries.

⁶⁸ Kropotkin, Petr. *Diaries of Different Years*. Moscow: Anakin Introductory Books, 1992. From 1882-1886, a collection of Peter Kropotkin's Notebooks in Siberia. Notebook 9, 264-266.

⁶⁹ Dugatkin, Lee Alan. *The Prince of Evolution: Peter Kropotkin's Adventures in Science and Politics*. Place of Publication Not Identified: CreateSpace, 2011. 14.

These were the foundational years in Kropotkin's development as an evolutionary biologist and serve as a source for the history of evolutionary biology.

Conclusions

From what we have seen, Kropotkin's correspondence in Siberia is an important source for the history of science, and I say that vaguely because they apply to more than one scholarly discipline, be it biology, politics, geography or others. This is proven by the examples in Kropotkin's notebooks and correspondences. Now his correspondence from Siberia might not contain the framework of mutualism that led to his *Mutual Aid: A Factor of Evolution* or his vision of a communist anarchism expressed in his *Memoirs of A Revolutionist*, but they do seem to be the reflections he turned to when he began to formalize those ideas. Even broader than the significance they have to the history of science, Kropotkin's ideas and life works have become more associated with contemporary thinking than in his own time. For example, Dugatkin pulls a line from Montagu's 1952 book titled *Darwin, Competition and Cooperation* that vividly reflects how important Kropotkin's literary contributions have been in understanding how cooperation influences evolutionary history:

"Kropotkin's book is now a classic- which means that few people read it and that it is now out of print. Yet no book in the whole realm of evolutionary theory is more readable or more important, for it is *Mutual Aid* which provides the first thoroughly documented demonstration of the importance of cooperation as a factor in evolution. Kropotkin's

book, one may be sure, is destined for a revival, and the influence it has already had is likely to increase many fold with the years.”⁷⁰

Álvaro Girón has also drawn attention to this development. In his essay, *Kropotkin Between Lamarck and Darwin*, he concludes “The brand of optimistic evolutionism promoted by Kropotkin, became a complete anachronism in the bellicose atmosphere of the 1910’s.”⁷¹ These conclusions by modern scholars, coupled with the liberal thinking and alternative-seeking mindset of today’s society brings even more importance to why these notebooks are relevant and worth examining. The importance his notebooks will have on history and the ideologies he has influenced will only continue to grow with time, and the Siberian diaries will remain a crucial starting point for those interested in the history of science.

⁷⁰ Dugatkin, Lee Alan. *Cooperation among Animals an Evolutionary Perspective*. New York: Oxford University Press, 1997. 8; Montagu, Ashley. *Darwin, Competition & Cooperation*. New York: H. Schuman, 1952. 42.

⁷¹ Giron, Alvaro. "Kropotkin Between Lamarck and Darwin: The Impossible Synthesis." *Asclepio* 1 (2003): 213.