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Alternativní ekonomické chování v rurálním Rusku

Alternative economies in rural Russia

Diplomová práce

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Abstract

The aim of this diploma thesis is to study how nonhuman agents are introduced and employed as a replacement for social reproduction by analyzing the environment and types of exchange practiced in the countryside of post-socialist Russia. The farm where my fieldwork took place exhibits many types of exchange, among which cryptocurrencies, seen as a socio-material algorithm, are used for the redistribution of essential goods and/or favors in a method similar to those used in former socialist and post-socialist economies. Drawing from the anthropological discussion on gift-commodity logic in the area, I look at cryptocurrencies as a hybrid - they hold the qualities of a gift (authority, name) and could be used to speculate with on the crypto stock-exchange (commodity).

Key words: alternative economies, post-socialism, cryptocurrencies, algorithms, sociomateriality

Abstrakt

Cílem této diplomové práce je prozkoumat způsoby, jakými jsou věci (non-human agents) uváděny a používány jako náhrada sociální reprodukce v rurálním post-socialistickém Rusku. V prostředí farmy, na které jsem prováděla terénní výzkum, se objevuje řada směn a transakcí, mezi nimiž jsou kryptoměny, studované zde jako sociomateriální algoritmy, zapojovány do redistribučních sítí zboží a služeb (favors), které jsou součástí širších praktik v socialistických a post-socialistických ekonomikách. V návaznosti na antropologickou diskuzi o mezním charakteru daru a komodity (gift-commodity dichotomy), do které se významně zapojili i etnografové post-socialistických ekonomik, pojmám kryptoměny jako hybrid, který spojuje vlastnosti připisované darům (autorita, jméno) a zboží, které je předmětem směnářských spekulací na burzách s kryptoměnami.

Klíčová slova: alternativní ekonomika, post-socialismus, kryptoměny, algoritmy, sociomaterlita

Introduction

Alternative economic practices, including alternative currencies, interested me as kind of a resistance strategy for organizing one's life. When I first proposed to study them for my Bachelor thesis at the University of Economics in Prague, my supervisor smiled at me: "It is about what was happening in socialism when there was nothing in the shop, but if the vendor knew you he always found something under the counter." I laughed back but was a bit surprised, not because his example did not, in fact, refer to alternative *currencies*, but because not a single example from my thesis came from post-socialist countries. The majority of cases described in my thesis came from countries like Germany or Denmark. And in transactions similar to the one described above, the vendor and customer would know each other and agree to pay for a product or service with a special coupon towards their mutual benefit. Nowadays, a lot of similar practices are fully integrated within capitalist markets, with offerings such as bonus and discount programs for a client's *loyalty*. With some historical exceptions, none of the contemporary alternative currencies dealt with either scarcity produced by the soviet redistribution logic or survival practices. I had never heard "alternative" used to describe a transaction like the one my supervisor mentioned.

When post-socialist countries started to join the global market economy, most of these practices were labeled as "informal", although this term came from the Western tradition of calling everything that does not fit the Western way of doing things "informal" (Hann, 2006). When I first heard about the appearance of "alternative" currencies in two Russian rural areas (first in Shaimuratovo, Bashkiria, and then in Kolionovo, Moscow), I wondered whether it was the same "alternative" I had studied in my thesis. My interest was further amplified by my experience growing up in urban post-soviet Russia before moving

to the Czech Republic - I still remembered bartering with neighbors, food coupons and the widespread usage of social networks to get things done. All these practices seemed widely used and could be and were considered a mainstream. At the same time, disciplines like classic economic theory consider everything that is not a mainstream, established practice as an alternative, leading to those practices being viewed as informal or even corrupt. Anthropologists argued that the definition of “alternative” is found in the Latin root of the word *alternare* “implying oscillation, a movement back and forth between an ‘is’ and an ‘as if’ rather than a specification in ontology” (Maurer, 2005). So what implied the alternative of the post-soviet economy?

Alternative currencies have a very *loud life* - it seems that not a single case goes unnoticed by either the media or scholars. Quoting the former Greek Minister of Finance, Yanis Varoufakis, the reason might be that “there’s no such thing as apolitical money” (Varoufakis, 2016: 98-99). Or perhaps it is the centuries old pursuit of associating economic life and money with liberty, which keeps producing ideologies that emphasize individual liberty and see money as a key component of that liberty (Maurer, 2013). Whatever is the reason for this attention, alternative currencies seem to be largely co-created by the enthusiastic hype around them.

I decided to follow the trail left by the media and found the farmer from Kolionovo, Mikhail Shliapnikov, who, in the wake of a government order banning the use of his alternative physical currency called “koliony”, created a cryptocurrency with the same name in its stead. I told Mikhail about my research interest and asked if I could visit. He answered that he is *always* there and I can come *anytime*. I made my first trip to Kolionovo in March 2017, a long detour from Moscow, which took almost one day. When I arrived at the hamlet, Mikhail met me at the desolate bus stop. We quickly became friends over a cup of tea. He told me that the alternative currencies they had printed were now forbidden, but that they will start using *their own cryptocurrency*, another hyped word from every newspaper and media outlet. Bitcoin, blockchain technologies and speculation bubbles that cryptocurrencies create are often described as an alternative finance, the future of money,

dangerous games, frauds, etc. But what does it mean to *use* them?

The farm was empty at the end of March, There were no workers, no work to be done and no inhabitants of the hamlet; most of them were in the city. Mikhail told me a lot of stories about himself, the farm and his constant “war for independence and justice” from and against the local authorities. As I planned to study exchange – the process which occurs when property of one sort passes from one person to another -- I realized the most convenient way would be to step in and include myself in this process; I had to immerse myself in and take part in the daily life of the farm. I arranged with Mikhail to return for the summer, and he offered to accommodate me in one of the rooms of an abandoned hospital near the farm. Living at the farm provided me with an observation point, as it was the intersection of the several processes that took place in both the real and virtual space. It also provided me with constant access to the farm’s inhabitants, visitors and people from the hamlet and nearby villages, which would have been hard to gain if I had stayed elsewhere. At the same time, I tried to use every chance to follow the paths of actors that were extending the farm and the hamlet.

When I returned in July, I settled in the former hospital and immediately offered to help with farm chores. The main activity at this time of the year consisted of weeding trees, but I was assigned to help with smaller tasks, as weeding required more agricultural expertise that I could provide. I ended up feeding birds and collecting eggs from the chicken hut. When a new flock of quail was born, I was in charge of taking care of them - cleaning the cages, feeding and regulating the temperature. I was also asked to help with the farm’s website, including translating it to English and sometimes assisting Mikhail with software installation. Besides being a “quail-sitter” (as I was sometimes referred to by other inhabitants of the farm), as an ethnographer, I had another role, one that I only discovered later. While taking notes on a conversation that Mikhail was having with a visitor, the former said that “if there are any accusation from prosecutors, I will announce that there is a researcher here. And I am not manipulating anything here, she is writing her thesis. She is not from the police committee, but from the university. It’s something she’s doing not for

the publicity of the currency, but for its history. This information will drive our haters crazy - on one side there are persecutors, and on the other there's this researcher who is interested in us." (Audio-recording, 19.07.2017). I discovered that the sheer presence of an ethnographer can serve as a "protective gear" and even legitimize some activities, especially with alternative and crypto currencies having an ambiguous legal status in a lot of countries. I do not know if this information was ever used to settle things down later, but it is a challenge to think that even when the ethnographer attempts reflexivity, and however diverse the roles she performs in the field, the actors might prescribe completely different meaning to her presence.

1.1 Theoretical inspirations

The theoretical inspirations for this research follow two main lines: the first focuses on anthropological literature about exchange practices and the economic transformation of post-socialist countries. The second draws from general research on money, alternatives and sociomaterial algorithms.

With the first line, I examine the means and character of exchange performed at the farm, looking at the work of anthropologists in Russia and other post-socialist countries, who started with the effects of last century's collectivization, socialist and post-socialist economies (Humphrey, 1998; 2002; 2012; Verdery, 1996; Paxson, 2005) and continued with the economic transformation in late 1990s. This includes research on post-socialist networks, ethnographies of gift, modes of redistribution and financial schemes (Caldwell, 2004; Ledeneva, 1998; Musaraj, 2011) and the discussion in anthropology regarding the morality of exchange and the dichotomy of gift and commodity economies (Parry and Bloch, 1989). I am also borrowing concepts and remarks from classical studies in economic anthropology, such as Bohannan (1959) and Weiner (1980), coming from different geographic areas, as well as recent contributions and thoughts on value, temporality and the anthropology of money (Graeber, 2001; Guyer, 2012; Maurer, 2005; 2013; 2015).

The second line of literature examines an anthropological perspective on exchange and circulation and its contemporary forms, and draws from material studies and science and technology studies (STS). The occurrence of new forms of payment and alternative systems is not a novelty in itself – currencies and market systems in different places have changed in form, subject and interpretation throughout centuries. The importance consists in how new agents are assimilated into the existing modes of exchange and circulation, and how they contribute to the new interpretation of value. Cryptocurrencies in particular have a “coded” materiality that is constantly present in exchange, and combined with a media hype makes them a ubiquitous, global phenomenon. Considering them from this global perspective tends to create generalizations of the way they manifest. Studies of “online communities” concentrated on different thematic forums, similar to the visibility of “on chain” transactions in case of Bitcoin, is one of possible ways of exploring this phenomenon. How do they enter different governmentalities, geographies and local practices? Though at the time of my fieldwork they were still freshly introduced, they are framed within the broader arrangements of sociomaterial practices (Introna, 2013).

1.2 On methodology and ethics

In total, I spent over one month at the farm, leaving it only once for a short time. During the first week I worked exclusively around the farm and the tree nursery, figuring out how the whole place operated and made fieldnotes on everyone's activities. I would later widen my observations to the rest of the hamlet, though not many people were willing to talk to me. They would agree to speak to a stranger only after a formal introduction. Some unfortunate attempts to communicate made me return to the farm and pay more attention to the events and visits in my immediate proximity. I recorded several guided interviews with actors with whom I was not in constant contact - including some of the workers, who were spending most of the time working in the field, or visitors. In other cases, I would start recording on a mobile dictaphone in the middle of a conversation if something interesting transpired. I tried to listen to the actors while they were working and

talking between themselves; I also noted what they were silent about.

Exchange is an action which is performed and which is also described. By the actors, as well as by the researcher as a participant-observer. I took in the exchange at the farm in all its complexity and marked any transaction that I noticed or performed myself. Exchange, occurs when the property of some sort passes from one actor to another, it can also include monetary or non-monetary forms. In the field, I did not categorize transactions by form, with the exception of “recurring” and “singular”, but I created several clusters post hoc, mainly for better readability of the text.

Since the farm is already getting substantial publicity, I left most of the names of the actors and places unchanged, with the exception of interviewees and people who did not give direct consent to use the information they provided in informal talks and observations. Most of the actors with whom I shared daily life and activities orally agreed that anything they said or did could be used in my research. With others, for example visitors, I announced that I would record the conversation for research purposes. I anonymized actors in some short-visit cases or spontaneous situations and discussions, which I witnessed, noted and used later in this thesis.

All interviews and discussions were conducted in Russian. When making fieldnotes and writing an ethnographic journal, I used a mix of English and Russian. Translations and transcriptions in the text are all mine, with some deviations due to the final proofreading.

1.3 Chapters summary

This thesis consists of three thematic chapters, complemented by the Introduction and Conclusion. In Chapter 2, Post-Apocalyptic Village, I introduce the hamlet, the farm and its actors, and set them up in the context of the post-soviet Russian rural area. I follow the exchange and its forms as they appeared during my fieldwork, including “alternative currencies”, with discussion and interpretation offered by literature on post-socialist economy, exploring what constitutes the transactions and how exchange operates inside the

farm, the hamlet and beyond.

In Chapter 3, *Post Socialist Networks: Between Gift and Commodity*, I draw upon the discussion of the dichotomy between gift and commodity, what the study of post-socialist exchange brought to this discussion and how this aspect emerged during my own field research. I also explore how social networks were re-conceptualized into the “creation of redistribution schemes”, and how they are implemented in the economic activity of the farm.

The final thematic chapter, *How Blockchain Came to the Farm*, follows the emergence of the farm’s cryptocurrency in the frame of practices described and discussed in the previous chapters and explores the materiality of the algorithms which are used for the creation, functioning and endurance of this cryptocurrency. The Conclusion summarizes the previous chapters and synthesizes the findings to show how speculative practices, and cryptocurrencies in particular, manifest as a replacement for the social reproduction of the disappearing hamlet.



Kolionovo, former hospital. Photographed by the author in 2017.

2. Field Description: The Post-Apocalyptic Village

Kolionovo is a remote hamlet in the Moskva oblast region of Russia, situated 30 km away from the closest town - Yegoryevsk. It is located at the dead-end of a byroad, in the proximity of the slightly more populous villages of Zhabky and Pochinky (img. 1). At the time of my visit, the village had 9 registered inhabitants, not including dachniki – seasonal occupants of vacation houses. Kolionovo has never been remarkably populous, reaching its peak of 200 people just before the Bolshevik revolution (Census, 1906). Throughout the last century the hamlet's main activity revolved around a hospital and a mortuary, which were closed down several decades ago. The ensemble of wooden edifices built in pre-Bolshevik times by the local landlord still occupy a significant part of the hamlet's area today. These buildings have been abandoned for approximately 10 years, together with countless other traditional wooden houses dating from pre-revolutionary times, which can be found in Kolionovo and the neighboring villages. All of them were a part of the same state owned farm – sovkhhoz, during the Soviet era.



Img. 1. Kolionovo and neighboring villages

That is what I discovered when I first “landed” in March 2017 on a single-street

hamlet that had no asphalt road, along with one farm and a shaky line of abandoned wooden houses. It seemed like there were no humans around to participate in the process of local exchange that had brought the village into the spotlight of national and international media. Was the whole story a bluff? Nevertheless, despite the absence of a “local community” as presented by the media, I returned to Kolionovo that summer in an attempt to understand the changing landscape of the “Russian farm of the 21st century”.

Much of the transitional and post-transitional literature on the countryside often documents the decline of life in “villages” throughout different Russia locations (Ioffe, Nefedova 1998; 2002; Paxson, 2005; Gambold-Miller, Heady, 2006). The disappearance of Russia’s villages and rural life were observed by both Russian and foreign researchers, often with a general nostalgic tone accompanying descriptions of the fading “traditional” peasant lifestyle and the absence of social reproduction (Paxson, 2005). The latter is also represented by statistics - between the censuses of 1989 and 2002, nearly 10,800 villages disappeared, with an annual average of 825 villages. In 2010, almost 13% of Russian villages did not have any residents at all, while more than two-thirds of Russia’s regions had a death rate that exceeded the birth rate. Statistically, Kolionovo had vanished by 2002, as the year’s census showed zero people claiming to be permanent residents there. But, had it really disappeared? Apparently the space itself persisted, together with the rows of abandoned edifices and neglected vegetation. Places like these exhibit various degrees of isolation, but they all reflect a general pattern which was persistent in Russian rural areas for decades: “like dough rolled out so thin it tears apart, these ruptures in the established bulk of human colonization have been expanding as the pace of rural population’s decrease has intensified.” (Ioffe, Nefedova, Zaslavsky, 2004:914)

At the same time, these declining numbers obscure a significant increase in the migration of the population (Ioffe, Nefedova, Zaslavsky, 2004). The “village” as the definition of a place has been a social hybrid in Russia, operating with a relatively high degree of self-definition and self-sufficiency on one hand, and economic and political controls at regional and national levels on the other. The collapse of the Soviet state triggered some of its most significant changes and accelerated a series of existing trends that included a massive decrease in population. In the aftermath of these changes, both rural and urban areas started to heavily rely on subsistence-oriented agriculture. Humphrey (2002) pointed out two main processes - “smallholding activation” from the inside of the villages, which arose from the restructuring of previously collectivized farms, and “dacha

activation”, urban farming which often reached the countryside. Both activations, together with an increasing movement of population between towns and villages, gave birth to a highly heterogeneous environment. Despite its mixed character, this environment developed a certain level of autocracy (independence) as a side effect of its seeming non-existence.

The hybridity of the “village” is also shaped from the “above”. This is where state institutions, regional controls, property laws, and also businesses (nowadays largely state-subsidized) come into play. The rising number of corporate enterprises have significantly contributed to the symbolic degradation of the countryside, as industrial agricultural technologies require fewer workers and less knowledge of traditional farming techniques (Caldwell, 2011). Nevertheless, you can still find about half a million, small family and semi-subsistent peasant farms caught in-between these agro-conglomerates, with which they can hardly compete. The threshold for privately-owned, small-scale farms to enter the market is very high, and few households are willing to participate in marketed production even if they receive state support or credit (Nefedova, 2012). Most of my respondents complained that they would not risk taking a loan or a subsidy, as they have seen numerous cases of failure all around: the yearly interest rates for agriculture are too high compared to the possible risks caused by weather conditions or unstable distribution channels. On the other hand, industrial agriculture is developing rapidly, especially around big cities. In Russia, the 10 most developed agricultural regions are situated around the largest metropolitan agglomerations, leaving behind “isles” of desolation like Kolionovo.

I opened my description with an emphasis on disappearance and the feeling of hopelessness (*beznadezhnost*) which often emerges beyond statistics as a reality of those “isles”. This survivalist mode has its own constitutive quality, which often surfaced through my interviewees’ bitter feeling towards the absence of people and biological and social reproduction. I would often hear phrases like: *no one to take care of it* (*nekomu zanimat’sia*), *hands are missing* (*ruk net*), combined with recurring discussions about death. The average age of the local population, the stories they tell, the declining number of able-bodied workers and their everyday decisions contribute to a post-apocalyptic mood where “the end” is not a singular event, but a persistent condition, expressed in everyday talks, like this excerpt from one of my conversations with local actors:

M: There is only one granny left from my “army” - she is in the city now. They

were 11 here when we were organizing a “revolution” and pushing for the impeachment of local authorities. So many of them died during one year...

V: People are dying here. Almost everyone died.

M: There are not so many dachniki coming nowadays. Usually there are more, but you don't see them. They sit somewhere there, near the swamp.

V: Where? I know only the ones behind my house.

M: There are more on the hill - Dima and Liusia are there... The others live in the swamp (referring to the road). What do they care? They don't live here, just come and go sometimes. In winter there are not so many people living in the village. (From the conversation, recorded 16.07.2017)

This doomed centrality of death has often been noticed by anthropologists studying exchange in different contexts and localities. In her research on the Trobriand islands, A. Weiner (1980) marked death as a regulatory force in transactional events, looking at exchange through the perspective of temporality. For the Kiriwina people, death marks the start of circulation for nonhuman objects. It is what Weiner called replacement - the process that substitutes reciprocity when life is over, ascribing the perspective of death to all exchange activities, past or future. Does the notion of replacement by non-human agents work only in the context of Melanesian islands? Another example is the case of 'Are'are of the Solomon Islands (Coppet, 1994) - a nonhuman substitute exists for each of the three parts which constitute a human person from their perspective - body, breath and image. Strings of shells represent one of the three fragments of the deceased – his ancestral image. The strings are considered to be money and parts of them are used and recombined in everyday life transactions, marking events like marriage, murder or the purchase of a canoe. The only time when the strings appear in full length is during funeral feasts, where they anticipate the money's appearance in its entirety at death. Money can also serve as a “stopper” for revenge in the case of homicide. In all of these cases, networks are composed of both human and non-human actors – they differ in the way they are absorbed and consumed.

The vastness of the village also shaped the character of my presence there as an anthropologist – for a moment, I was the youngest temporary-permanent resident of the hamlet. The character of my ethnographic work together with the farm chores with which I

was entrusted, reminded me of the process through which knowledge is transmitted to the young and made me feel “adopted”. This was further accentuated by my lack of mobility during the fieldwork. Without a car, one's life in the area is either fixed to the places that can reach by walking or by buses, which passed through the hamlet only twice per day.

The above-transcribed conversation is an excerpt from one of the talks I recorded between Mikhail and Valentina, his mother in law. Mikhail (53), the owner of the only active farm in Kolionovo, was born in Moscow, moved to the village in the early 2000s and started farming in 2005. His wife Nadezhda's family was from the village. He was one of the people described by Humphrey as brokers during the 1990s (2002: 86) - people involved in trade with a wide range of social networks and connections, the essential part of conducting business in Russia during times of “transition” (Ledneva, 1998). A car crash and subsequent health complications brought him to Kolionovo, where he came “to die” according to his own words. He rarely leaves the farm, although he and his wife also own an apartment in Moscow. Both of their children live abroad.

Valentina is a pensioner. She was originally from Kolionovo and also lived in her family house during summer. She left the village during her early twenties to work at the factory in Moscow, and moved frequently between Moscow and Kolionovo. In Kolionovo, she takes care of a food plot and grows seasonal fruits and vegetables. She also raises approximately 35 hens she calls “lovelies” and keeps on a special diet consisting of mashed potatoes, salads and fruits. She repeated often: “Your cattle feeds you, you are responsible of taking care that it is fed back accordingly.” Her plot is enough to feed herself and Mikhail's family, while any surplus is sold.

Other inhabitants of the hamlet also constantly travel between village and city. During my fieldwork, I met several older women who had a family in the city and a house in Kolionovo, where they lived during summer taking care of a smaller plot and poultry. Several other families, both locals and outsiders, use their house in Kolionovo as a summer residence.

2.1 The structure and economic activity of the farm

Mikhail formally registered his farm in 2007 as a krestjanskoe khozjajstvo (private

farm), but he had already started farming there in the late 1990s. Situated behind his house, next to the village entrance, is a 42 hectare plot which serves as the farms' tree nursery. The wholesale of trees is the main activity and source of income for the farm, with clients like the Moscow city administration and individual homeowners buying trees for their gardens or Christmas trees. A specialized car picks up big orders while customers retrieve smaller orders themselves.

Production at Mikhail's farm also consists of breeding and growing free-range poultry, with a headcount of around one hundred broilers, hens, ducks, and quail at the time of my fieldwork. The poultry is combined with other seasonal petty production (vegetables and fruits from the plot, jams, mushrooms, game) and products from neighboring small farms (dairy, cheese, honey) into a so-called "farmers' basket". Nadezhda, Mikhail's wife, delivers the baskets to customers in Moscow, where she drives every second week.

Farm labor is executed by several wage workers. One of workers during my field study, was a 45-year-old man from rural Moldova who was permanently living at the farm and had already been working there for several years. He rarely traveled to visit home and was "the main" (Glavnyj), meaning that he controlled and regulated the work of others. He was also the only "qualified" agro-specialist working at the farm. He is a professional tractor driver and was in charge of plowing the field. He also performed most of the mundane physical chores, such as feeding and cutting poultry, repairs and harvesting.

Other workers are seasonal, mainly employed as day laborers. Some of them returned to work at the farm when "there was work and when the farmer had money to pay", others were new, such as the two workers who were present at the time of my fieldwork. They lived in Yegoryevsk and travelled to the village every morning by bus. The third worker, Andrej, was from the nearby village of Pochinki, and he commuted to the farm by bicycle. The range and character of the work differed, and was highly dependent on weather conditions, but generally they worked from 8 AM to 7 PM in the tree nursery or vegetable plots.

2.1.1 Exchange

The reason I came to Kolionovo was to study the community's usage of self-created money called koliony, started as a "game" by Mikhail and his neighbor. By the time of my first visit, Mikhail's neighbor had passed away and the currency had been forbidden by a

court order. This did not seem to deter Mikhail, who claimed that he was already working on a “virtual” version of koliony on which I will elaborate *infra*.

The currency’s appearance did not come as a surprise in the context of sanction-ridden Russia. There had been numerous cases of alternative currencies used in economies of shortage and siege (Blanc, 2000), as well as part of politically charged discourse where the “alternative” stands to defy state-issued currencies. The amount of multi-disciplinary research on the topic in last decade shows that alternative and informal practices persist throughout post-soviet countries (e.g. Polese, Morris, 2015). As anthropologists noted after the fall of socialism (Verdery, 1996; Humphrey, 2002), not only rural areas, but also cities and towns all around the former Soviet Union have had complicated relationships with money as defined in western capitalist economies. In the countryside they were often absent altogether, especially during the critical “transition” period from the 1990s to the early 2000s. Ethnographers documented how villagers from different locations used labor, alcohol or meat as currencies (Hivon, 1998; Rogers, 2005), in addition to various types of barter. Nevertheless, the usage of fiat, the official state currency, or general-purpose money (Polanyi, 1944) in rural areas has since changed because the remaining villagers received state support in rubles, and cash and other payments from city-village actors like *dachniki*. This remark from my field-notes illustrates the radical transformation undertaken by these means of exchange:

Ungroomed men were queuing for a plastic bottle of rum with a handful of coins. A credit card terminal from Sberbank (Russia’s biggest state-owned bank) was resting on the counter above the shop's debt-book. “We can pay by card here, maybe soon they'll start accepting Bitcoin” - visitors from the city were joking. (Fieldnotes, Village shop in Pochinky, July 2017)

This is only one of the many forms exchange can take, with others having been already described in the aforementioned ethnographies. Therefore I decided to follow several other persistent and seemingly contrasting transactions that I encountered at the farm, which took place between several groups of actors and existed beyond the notions of “formal” or “informal,” all with the goal to analyze and discover at what point, and more importantly, for what reasons, did this new type of currency appear. I have separated this analysis into three separate descriptions of exchange: monetary, non-monetary and “other,” or koliony and cryptocurrencies.

2.1.2 Monetary exchange

Monetary exchange at the farm and in the village was predominantly executed between farmers and workers in the form of wages. Workers received a fixed rate of 1,000 rubles (14 euros) per day cash in-hand, or what is called a “black payment” (na chernuiu). The payout was completed on request, most commonly by the end of the week, but also at the end of the day if necessary. I did not witness any cases of advance payments or credits, but several conversations revealed that it was practiced with trusted workers. During one such conversation, Glavnyi was describing previous workers at the farm, “A couple from Kazakhstan once came to the farm, worked for several days, asked for an advanced payment and disappeared,” adding that, “you can't trust everyone these days.” Workers considered Mikhail to be honest and trustworthy because he only employed people when he had money to pay for their work.

Glavnyi was paid monthly and had a slightly higher wage than the day-laborers. Additionally, he was the only registered worker, as his migrant status required a work license in the territory of Russia. His salary was paid in cash and preferred rubles, but he “also accepted euros and dollars.” Most of the wage workers came from outside of Kolionovo, meaning that the majority of the cash they earned did not stay in the village. Cigarettes were one of the main goods which were exchanged for cash, together with some food supplies - bread, coffee, tea, and beer. A trading truck (avtolavka) brought food and basic hygienic products to the villages twice per week, and the locals would spend cash at the truck on these occasions. Cash was also used to purchase supplies for agricultural production that went beyond what was self-produced, such as additional eggs for incubation, seeds, building materials, electricity, and diesel oil and for expenditures on bigger repairs. Parts of the “farmers’ baskets” from neighboring farms were also paid for with cash (more about this in the distribution section, *infra*). Cash usage was otherwise limited to the city and purchases made outside of the farm.

Another source of cash circulation within the hamlet, arose from the relationships between locals and farm workers on the one hand, and dachniki, on the other. Dachniki were townspeople, usually from Moscow, who had bought or rented land and houses around, or directly in, Kolionovo. They were usually highly mobile, owned a car, and were constantly travelling between the city and neighboring villages.

During the Soviet period, the allocation of dacha plots was usually managed through workplace or party affiliation. As a result, Caldwell (2011) noted that dacha communities were typically extensions of preexisting relationships that were transplanted from the city to the countryside. Additionally, Caldwell's fieldwork observed the disintegration of established dachniki communities when shuffled with "outsiders," "newcomers" and Muscovites, who rarely managed to integrate (Caldwell, 2011). The role of this transient population is highly visible and significant especially in small villages. For example, every second house in Kolionovo was owned or rented by dachniki. I also noticed that the majority of farmers I encountered, including Mikhail, belonged to one of those "older dachniky communities", meaning that at some point in the past they used their houses as summer residencies. But now they identified themselves as farmers and the separation was quite clear - dachniki did not produce anything for sale and came to the hamlet only for recreation. Dachniki were also often accused of a consumption-oriented, indifferent, approach and even disrespectful behavior towards "nature and the environment." Nadezhda often told me stories about people leaving bags with garbage in the forest; but, at the same time, it was not uncommon to hear sentences like "they are dachniki, but they are decent people" from people living at the farm.

Indeed, contrary to the description in Caldwell's ethnography (2011), most of the dachniki in Kolionovo did not seem to follow the philosophy of "relaxation through physical work." Instead, they hired workers and preferred to buy all their necessary products either from the supermarket or from local farms and households (s ruk). For example, strawberries grown at the farm in the neighboring Zhabki were often sold to dachniki for some immediate extra cash by that farm's worker, his wife or Glavnyi from Mikhail's farm - they were all from the same village in Moldova. Dachniki also paid for labor performed at their house and preferred workers who were already employed by one of the farms nearby. In those cases, the immediacy of cash transactions was often replaced by the use of alcohol as "warranty". This situation often occurred at the farm during the weekends.

Once, Glavnyi returned to the farm in the evening drunk. I asked him why he was drunk and he replied that he was repairing a neighbor's tractor, which was "old crap" and took ages to find the necessary parts to fix it. I asked whether the neighbor paid him for his work, and he said he should - he promised to give him five thousand rubles (piatjorku) the next day. I asked whether the neighbor is from the village. Slava said he was one of the

dachniki and made a disapproving hand gesture (Fieldnotes, 16.07.)

The presence of dachniki also sparked a surge in nomad moonlighting - cars with workers often came to the village during the weekend, leaving a paper ad at the bus stop or directly asking around if there was any need for physical labor or construction work. Their arrival usually coincided with times when the dachniki were coming to the village, and the groups were mostly composed of locals from neighboring villagers, often “non-Russian” (nerusskie - as referred to by the Moldovan workers), meaning gypsies or people from the Caucasus region.

I personally encountered the moonlighters during my field work. On one occasion, I was sitting outside when a car arrived and two men stepped out. They came over and asked me if I was the owner of the place and whether I could bring them some drinking water. They said they offer construction services, mainly roof repair and “all for a good price.” I told them that they should go ask the workers for water at the building down the road. One of them came running back, and said he was scared by a dog. Again, they asked me to bring them some water. I went in and told Glavnyi about them. He cursed and asked if they were Russians. I hesitated to answer. He helped me fill a bottle from a gallon water tank and we went outside together. Glavnyi told the men that his boss was in Moscow and personally didn’t need any workers. The men left and Glavnyi turned to me, wondering aloud what those men were looking for - who would give them work like that, just by driving around and asking. I suggested that maybe dachniki often need someone to make repairs and he waved a hand and said – “Dachniki...I know those dachniki, they all want a lot of work for too little money.”

These “nomads” were also engaged in selling things. One day Mikhail and I were standing outside at the bus stop when an old Lada appeared and drove very close, until the driver's window was almost in front of our faces. Two men were sitting in the car. They looked at Mikhail and then me, but chose to address Mikhail: “Hello father, don't you want to buy a tea-set? Very good, but also cheap, only 1,000 roubles.” Mikhail answered he didn't need a tea-set. Then they pointed at me and suggested he purchase it as a dowry for his daughter. Mikhail asked the driver why he would not purchase a tree from him instead. He pointed to a nearby tree and said: “This one is good, a young oak. I will give it to you for 5,000 roubles.”

”And what if I take it?”

”I will bring you a shovel and you can dig it out.”

The driver cursed, closed the window and drove away quickly. Mikhail told me they were “gypsies, stealing crap and trying to sell it to dachniki or grannies, always moving between villages.” (Fieldnotes, March 2017).

Monetary relations, in terms of money for labor, were mainly executed by people coming from outside of the village and rarely by those who were living in the hamlet or nearby. In terms of working relations, the exchange of labor for cash was problematic, as Mikhail once complained in a conversation:

One woman I know from Moscow moved in order to build a house in a village even more remote than Kolionovo. She had power and money. She went to the locals and said – muzhik, I need help to build a house, she asked for help, she was helped. Another woman like that arrived and said - hey, there is work for five thousand for two hours, who wants to take it? She showed disrespect to the society. You show that you are rich when one has a pension of 6,000 rubles and another doesn't have anything! But, there is this pride – No! For 5,000 we will not nail this log! If you would ask, we would provide it for free, but for that money – you're offending me. My monthly salary is the same amount! (Fieldnotes, 16.7.2017).

Kolia was one of the rare types of farm workers, who came from a neighboring village. His drinking habits and untrustworthiness did not make him popular among his peers, as he often skipped work or showed up late. This extended beyond his poor work performance into his financial decision making process. Mikhail also referred to Kolia as “problematic” because he was spending all his money on alcohol, “like most of the locals.” Glavnyi did not like him because Kolia did not know how to treat money: “He just spends everything he earns immediately on alcohol. He received a thousand yesterday and he bought himself a bag. Does he really need a bag? He wants to buy a car. What for? He gets so drunk he can barely ride his bicycle!” (Fieldnotes, 14.07.2017).

Discourse attributing morality to the circulation or spending of money appears often with the introduction of cash as an intermediary in so-called “traditional” environments (Bohannan, 1959). Bohannan analyzed the exchange that occurred between the Tiv people in Africa before and after the British brought general-use money (as in Polanyi, 1944) into the local economy. Bohannan called the Tiv exchange a “multi-centered economy” where

each set of exchanges had both different institutional and moral values connected to it. For example, foodstuffs were predominantly bartered for other food, livestock or tools, and metal rods were used to acquire prestige items. This led to the establishment of a hierarchy regarding conversion, which means, among other things, that metal rods could not be exchanged for food – not because the transaction itself was taboo, but because it would be considered as pointless, or “overpaying.” When British introduced coinage, they mistakenly interpreted rods (special purpose, prestige money) as a general currency and starting buying them with coinage money. When the same money was also used by them to buy food at local markets, the previously defined hierarchies of exchange started to shuffle, and the Tiv began complaining that local markets were now “spoiled.” The new money was considered to be cursed by the elders, as shown in Parry and Bloch’s (1989) collection of essays, which mention numerous examples of money “spoiling.” Furthermore, they argue that westerners have a tendency to separate money into an economic sphere and to idealize gift exchanges, leading to the perception of money entering a “traditional,” or “gift-oriented” society as something implicitly evil.

General-use money was also considered evil in some environments after the fall of the Iron curtain. In post-socialist countries, this meant not only breaking old circles of non-monetary exchanges and favors (Ledneva, 1998; Humphrey, 2002), but also attributing personality to consumption patterns (Dinello 1998; Pesmen 2000:126–145; Bloch and Parry, 1989). As Wanner’s (2005) ethnographic observations from Ukraine show, “the expansion of the market into Soviet society meant that morality and consumption fused ever more tightly. Drawing on a deep Orthodox tradition of seeing poverty as ‘saintly’, deprivation placed one on the ‘moral’ side of the national community in opposition to the ‘immoral’ side that consumed with wanton gluttony as the Soviet Union crumbled. [...] Yet, using individual consumption to gauge moral worth indirectly served to sustain a fascination with material goods and reinforced the practice of monitoring what other people acquired.” (Wanner, 2005: 520).

2.1.3 Non-monetary exchange and favors

In Kolionovo, non-monetary exchange occurred most commonly between wage workers, especially when the worker was living on his/her employer's farm. Workers like Glavnyi, and other migrants from former USSR states, consumed products from the farms they were working at and bartered them for services like haircuts or “technical

supervision.” This was tolerated by the farmers, as the general functionality of the farm often benefited from these types of barter and exchange of services.

One weekend, when returning to the farm from the nearby town, I found Mikhail, Glavnyi and another man I hadn't met before sitting outside with an almost empty bottle of vodka on the table. They introduced the newcomer as Georgii, and I found out that he worked at a neighboring farm in Zhabki, and came from the same Moldovan village as Glavnyi. He was very drunk and invited me to gather strawberries at the farm where he was employed as a guard. According to him, I could go to the field and gather strawberries any time because Glavnyi and Mikhail introduced me to him and he was the guard there. He had arrived with his tractor to borrow some fuel from Glavnyi and brought a bottle of vodka as a sign of gratitude. (Fieldnotes, 15.07,2017). Mikhail said that Georgii also promised to bring fish during the weekend to cook soup (ucha). This prompted Georgii to proudly show us photos of all the fish he caught in the nearby lake. Later, he called another friend from Moldova, who also lived in the neighborhood, and asked him to bring more alcohol. He hung up the phone and said his friend should arrive soon because he helped him build his house. Then he proceeded to show me pictures of this house on his mobile phone.

Several weeks later, the farm's tractor broke down. Glavnyi desperately tried to repair it, but said it was necessary to call in Georgii for expertise and help. I asked Glavnyi what would happen if Georgii couldn't help. He froze for a second and said that would be “the end.” Glavnyi explained that repairing this would require a trip to the city, 50,000 rubles in costs and, nodding at Mikhail's house, “he will be very pissed off and desperate.” The tractor was later “saved” with Georgii's assistance.

Strawberries from the farm where Georgii was working with his wife often served as payment for a favor or a present. They also supplied a means of subsistence to which workers had direct access.

This type of relationship, however, did not form between all workers. Favors such as buying cigarettes for each other, borrowing things, or even simple socializing were highly selective. For example, Glavnyi was closest to a man named Alexei, with whom he was communicated--and asked for help--the most. . Alexei was the youngest worker in the group, originally from a rural area near Samara, and Glavnyi would often refer to him as “the normal guy, *svoi chelovek* (our guy)”. Describing someone as “*svoi*” was crucial.

“Svoi” (one’s own) and “chuzhoi” (alien, foreign) are commonly used in Russian and can be applied to everything from claiming nationality and kinship, to consumer goods, politics, and clothing styles (Caldwell, 2002; Humphrey, 1998). The concept is based on the dichotomy between commonness (belonging to the circle or the kin) and otherness, but is highly flexible, dependent of the situation and context. It can be loosely used to convey sympathy and mutual understanding. “Svoi”, for example, was also a commonly used command when a dog barked at a stranger, indicating that that this person was a friend. It connoted a special relationship, in which flaws and mistakes were tolerated. The workers, I noticed, tended to form “svoi” relationships with the ones who came from a similar environment. Glavnyi would often refer to Vasiliï - one of the workers who came from the city - as arrogant and dislikable, complaining that he cannot perform basic tasks. “Have you seen how he holds the grass-cutter? Totally useless!” - Glavnyi complained. When asked about Alexei’s performance he would say “He is a normal guy, he knows how to work on the field.”

Similar dynamics also developed between the farmers themselves, as there were several other farms within a several kilometer radius, and “old generation of dachniks”. Every second week, Igor, the “cheese” farmer appeared in his car bringing canned meat and waffles, which were emergency supplies from a nearby governmental warehouse. Mikhail explained that some locals knew the guard there, and he allowed them take all the food supplies and redistribute them to their neighbors. Supposedly, the warehouse also housed bullets and other military ammunition, which were left untouched.

Igor was a dairy farmer from the nearby village of Larinskaia. Mikhail's farm bought cheese from him for personal consumption and for the “farmers’ baskets” that were delivered to Moscow. The redistribution of emergency supplies did not involve any profit-making - it is brought to friends and neighbors - to “svoi”. The canned meat was often given to Glavnyi, while waffles were always present on Mikhail's table. I asked whether this was done out of necessity, but Mikhail waved and said that it had always been like that with state property, and that today it had more of a “symbolic value”, as people like free things (*na khaliavu*). The “under-the-counter” redistribution of state-owned goods was very common during socialism, and as Ledneva (1998) noted, it was generally not considered to be stealing, but an interpretation of the socialist phrase that “everything belongs to the people.” In this sense, people were just accelerating the process of redistribution, but many of them were also using their access to goods as strategic leverage.

This also applied for “svoi” who were coming from far away but still belonged to the friend circle. One day, a friend of Mikhail and his wife arrived from a neighboring town to take measurements for a new heater. After they chatted for a while and the measurements were done, the friend asked if he could purchase some eggs from the farm. Mikhail called his wife and asked her to bring some, but the friend didn’t have any cash with him. Mikhail asked if he had purchased any koliony, but the friend said he only owned an old paper one. Mikhail laughed and said that it was illegal to use now. The friend turned to Nadezhda and said he could transfer money to a bank account, but she waved at him and said not to bother as they would deal with this later. As the conversation proceeded, Nadezhda asked if she could get a samovar from the couple’s town, and they promised to bring her one next time they come to Kolionovo.

In the case of “svoi,” exchange did not produce the relationship, but the existing relationship was likely to generate more transactions. In contrast, the favors that occurred outside of the “svoi” zone were surrounded by a certain level of discomfort. For example, there was another farmer who infrequently visited the farm and who the farm inhabitants never referred to as “svoi”. I did not meet this man, but he was occasionally mentioned when borrowing scooping equipment. Mikhail told me that this neighbor privatized a state farm and all of its equipment after the fall of the Soviet Union. He was allegedly caught in a debt spiral, aggravated by the multitude of bank credits he had borrowed and the poor yield of the farm. I asked whether Mikhail stayed in touch with this farmer and he said that they talk from time to time. Some workers later told me that Mikhail was borrowing equipment from this farmer. Glavnyi later complained that Mikhail usually relied on him to “arrange those things.” Glavnyi considered it Mikhail’s duty as the farmer to ask another farmer for this favor, as he “was just a worker.” After I brought it up again in conversation with Mikhail, he confirmed that he usually sent Glavnyi to borrow the equipment, saw nothing wrong with it, and stepped in only “if a problem appeared.” The problem--which had appeared--was later revealed to be the fact that the neighbor wasn’t very happy about lending out his property.

2.1.3 Koliony and cryptocurrencies

My first fieldwork occurred just a few days before Mikhail was due to launch an ICO (Initial Coin Offering) of the kolion – a “virtual” version of physical money that initially appeared at the farm and was forbidden by the government. ICO are sales of newly issued

digital tokens (cryptocurrencies) to investors in exchange for Bitcoins or other cryptocurrencies. In the case of kolion's ICO, they were exchanged for several cryptocurrencies with a total value equivalent to 400 Bitcoins. I will dedicate an entire chapter to cryptocurrencies, but at the moment I will briefly introduce them in the frame of the exchange.

At the time of my first visit in March 2017, I had a very limited understanding of how cryptocurrencies worked, and I was mainly interested in the initial alternative currency that was printed on paper and forbidden by Russian authorities. Furthermore, I did not expect that by the time I would return to the farm in the summer, the process which started with the launch of the ICO would become central to many of the events that took place at the farm. It is also worth mentioning that at the time of this writing, ICOs are seen as very controversial, and are actively discussed online by cryptocurrency enthusiasts and businesses alike, extending to government policies and public media. On one side, ICOs are seen as a way of providing a decentralized alternative to fundraising, prompting start-ups and established companies to launch them in the hope that they will grab the attention of supporters that are keen to invest in a new project, much like a crowdfunding event. On the other side, as Investopedia writes (Momoh, 2018), "ICOs differ from crowdfunding in that the backers of the former are motivated by a prospective return on their investments, while the funds raised in the latter campaign are basically donations. For these reasons, ICOs are referred to as crowd-sales."¹ Furthermore, the lack of guarantees offered when it comes to the implementation of ICOs, has generated numerous instances of fraud where the ICO-launchers disappeared after collecting the required amount. This brought about the reputation that ICOs are the "new pyramid schemes," frauds and/or traps for easy money seekers (Morris, 2017). Because these fund-raising operatives are not regulated by financial authorities, funds that are lost due to fraudulent initiatives may never be recovered. In early September 2017, the People's Bank of China officially banned ICOs, citing them as disruptive to economic and financial stability.



Img. 2. Paper Koliony, Photographed by the author in 2017.

Koliony, as paper tokens, were first printed in 2014 and bore the name of the hamlet. Mikhail describes their creation like this: “We were just sitting around with my neighbor and complaining that there is no money. And then we said - okay, let's print some then!” (Fieldnotes, July 2017). The coupons were intended to be used internally and were also sold to visitors, usually from Mikhail’s circle, as vouchers that could be exchanged for the future production of the village. Or, they could be used as tokens that would grant the bearer access to different farm events.

Paper koliony did not exist long enough to become fully functional, as authorities took notice and Mikhail was taken to court in 2014. The Central Bank of Russia was the main plaintiff, claiming that the currency was “endangering the sovereignty of state currency.” (Interview with Mikhail, March 2017) The case was highly publicized in Russian mass media, triggering the issuance of a new state law that forbids “money surrogates.” (Interview with Mikhail, March 2017) People at the farm saw the story as a continuation of a previous, local conflict. One of the locals had devised a privatization plan

for the former hospital building to turn it into a private residence. Mikhail and several other farmers protested this plan. The case was decided in favor of the protesters by the local court in Yegoryevsk, and the hospital remained untouched. The farm residents speculated that the subsequent accusations on the use of money surrogates were fabricated as revenge for the lost hospital. Because the koliony case dealt with state sovereignty, it was brought to the attention of a court of higher standing in Moscow, where a final decision was made to ban all “money surrogates” period.

During this time, Mikhail was constantly posting details about the trial and promoting local events at the farm on social media. At the time of my fieldwork, he was still using the same old laptop he'd been given by his children and a mobile USB stick to connect to the Internet. He started using the internet when he was diagnosed with cancer. First he joined oncology related forums, and then later, Russia's most popular blogging network - Livejournal. Subsequently, he increased his social media presence to cover all major national and international networks.

Mikhail considered his Internet activity to be a type of “work” and spent several hours per day reading, writing and “networking” on various forums and groups. After the ban on paper koliony, he posted a detailed account of the trial which received high profile media coverage. This brought him thousands of online “followers,” as well as the attention of cryptocurrency activists, one of which was the programmer behind Emercoin, who happened to be Russian himself. In a conversation I recorded during my fieldwork between Mikhail and a visitor at the farm, Mikhail said:

”One of the people in the Emercoin team found me. When the story with paper koliony was happening, he started sending me information about blockchain, bitcoins... He was appearing from time to time. Later, I don't remember exactly how, we called each other via Skype, chatted (pereterli) about our years in the army, military service. He lives in Portland. He told me to download a wallet and showed me how to use it. I bought some Emercoin, after we went to the website with the online exchange, and it all took less than 2 hours... Some time later they sent me the ASICs (hardware for mining Bitcoins), which I put there, in the chicken huts. It wasn't until I started to get more into all that, and understand what it means, because I started to be more interested. So there was their (Emercoin) team that was taking care of the new tokens. They were saying - you have a huge PR now and we

have our PR channels, but we can't compete with the type of PR from all over the world that you have..." (Audio-recording 23.7.2017)

Mikhail later tried to sell Christmas trees for Bitcoins, which attracted new customers and a new wave of attention from the media. He also offered workers at the farm partial payment of their wages in cryptocurrencies, and created virtual wallets to store pension savings for returning workers. The offer of getting partially paid in cryptocurrencies was accepted by the youngest worker, Alexei (24), with whom I occasionally chatted about this topic:

Q: What do you think about the kolions and do you have any?

A: Well, Mikhail sends me some every month. He is planning to enter the cryptocurrency stock exchange with them later. So I am waiting.

Q: Are you interested in cryptocurrencies?

A: I follow the Bitcoin news on the Internet, I think it is cool. Maybe when the kolion appears on the exchange, I will be able to exchange it to the Bitcoin. Or maybe I will just wait and see what happens.

Q: And why do you think bitcoin is "cool"?

A: It is something new, everyone is talking about it... Even in Yegoryevsk, everyone is reading news about it. They are asking about Mikhail and his kolion. Some people are even asking where to get some of the koliony - Mikhail is pretty famous around here... (Fieldnotes, 23.7.2017).

Other workers, and Mikhail's wife Nadezhda, were either ambivalent or dismissive of the topic. For example, Vasilii (53), a former academic originally from Yegoryevsk, the city-worker dismissed by Glavnyi for his poor grass-cutting skills, didn't care much about alternative currencies. He needed rubles to repay past debts accumulated during periods of unemployment, which is what he did with most of the income he got from the farm:

V: Oh, alternative currencies are a good old topic... Everywhere, not only in Russia.

Q: Are you interested, do you follow the topic, or are you also getting the new, "crypto" - koliony from Mikhail?

V: No, I am not getting into that, but I know that the younger generation, Alexei for example, are quite interested in those “toys.” I have other interests in working here, at this farm. The old paper koliony was a great story indeed, because the local Yegoryevsk “kings” thought it would be a great chance to take vengeance on Mikhail for the lost hospital. But it all turned even worse for them, as the case was taken to court in Moscow and gained so much publicity that it ended up exposing their activities. I think they were “pushed” (prizhali) from the “center” to let Mikhail be.(Fieldnotes, 27.7.2017).

Glavnyi, the only full-time worker at the farm, received a percentage of his pension in cryptocurrency from Mikhail, but was very skeptical about it: “Mikhail explains it to me all the time, but I just nod and don’t listen. I know that he opened some wallet somewhere and I get something like points or bonus there, but I am not interested in it. If I get euros, I understand, I can exchange them anywhere in Moscow. With this I don’t want to bother” (from the conversation, Fieldnotes 9.7.2017). He was also irritated and dismissive of paper koliony and could not understand why journalists were so interested in it. “There is a whole bag in the garage. But tell me, as a researcher. Can I buy cigarettes with them? Can I buy cigarettes? No. And tell me please - have you ever seen a Bitcoin? Can you put it in your pocket?” These questions often left me baffled, as Glavnyi refused to listen to any explanation without a proof of either practical functionality for him personally or physical proof of the material existence of Bitcoin.

Nevertheless, Mikhail kept a USB stick with Glavnyi’s crypto-savings, which he planned to send to Glavnyi’s daughter when she finished university. During my stay, I also created a virtual wallet, with the help of Mikhail, who gifted me with a couple of koliony. On the second week of my stay at the farm, Mikhail insisted that he show me how the whole process worked, including how cryptocurrencies worked and how you could create your own. I downloaded the application on my laptop (of the blockchain platform where koliony were issued) and registered a wallet, which had an address consisting of numbers and digits. Mikhail then sent 250 koliony to this newly created wallet, which arrived in several minutes. At that time, I couldn’t use them for anything, but later, when they would be introduced to the online exchange, I could sell or exchange them for other cryptocurrencies. Mikhail also showed me how I could issue my own currency using another functionality of the application - we created a billion tokens named “Virginia” and Mikhail informed me that I could now sell them to other people. I wondered why people

would buy the newly minted Virginia tokens. He answered: “Here is your turn to imagine what you can offer. You can bake cakes, for example.” (Fieldnotes, 12.07.2017)

2.2 Distribution: sociability turned into economy

”The main problem in the countryside today is how to sell what you produce. I've seen people throwing away milk because there are no distribution channels” (from the conversation with Mikhail, Fieldnotes, July 2017).

Mikhail's farm and several other bigger farms in the area sold most of their products in Moscow. In fact, they were constantly repeating that “everything is brought to Moscow.” Surplus eggs were rarely sold at the local market in nearby Yegoryevsk; the market was overrun with intermediaries, and local producers selling their own yield were hard to find. People from the hamlet and its vicinity were especially overwhelmed by the way cucumbers from the neighboring farm (Lichovets) were sold. This cucumber farm was quite famous in the area for a type of cucumbers that bore the place's name and that were praised by everyone. But it was impossible to buy them at the local market. “They bring everything to Moscow nowadays and here they are only sold by intermediaries. Twice as expensive as in Moscow!” - complained Valentina, Mikhail's mother in law.

Mikhail's farm adhered to a routine. On Friday evening and Saturday morning, Glavnyi slaughtered and plucked chickens, Mikhail gutted and washed them, and Nadezhda gathered eggs and harvested vegetables. Approximately every other weekend, Nadezhda drove to Moscow with bags of food, stopping in several places to complete the “farmers' basket.” I had a chance to accompany her on one of these trips. We drove for several kilometers in Nadezhda's car and stopped in front of a house on the main road. I asked whether she needed help and if I could come in. She declined, explaining that she was in a big hurry. She counted some cash, left the car and returned with several jars of milk. Nadezhda had bought milk from the family, which owned two cows, for Mikhail and herself, and for her “customers.” We then drove another 10km until we reached the neighboring village of Larinskaya, where we would pick up cheese from another farmer - Igor. He was waiting in front of his house with a pre-packed bag and greeted me through the window. Nadezhda stepped out of the car, put the bag in the backseat, paid him in cash and got back in the car. She said there was a sample of goat cheese Igor made for her to try and offered me a taste. I refused because I didn't have any knife to cut it with. She said I

was missing my chance, because she wouldn't be picking up more products from Igor for another two weeks, and maybe there wouldn't be any goat cheese then, as they only prepare it occasionally or by advanced order (po zakazu).(from Fieldnotes, 18.7.2017)

The completed baskets travelled with us all the way to Moscow, where Nadezhda delivered them to the door (k podjezdu) of her “clients.” Payment was either made in advance (predoplata) or subscription based.

Investopedia defines an advance payment as, “a type of payment that is made ahead of its normal schedule, such as paying for a good or service before you actually receive the good or service.” (Staff, 2018) In broader terms, an advance payment is equivalent to a microloan, a type of loan in which payments are made beforehand, such as before a shipment is made, a sale is completed, or a bill is due. Nadezhda explained to me that advanced payments limit risk in certain situations. For example, if someone didn't show up for the delivery. Baskets are also not ordered singularly, but in sets of 10 and are delivered every second weekend. They are also, “cheaper than the same amount of products purchased in the city’s supermarket.”

Mikhail developed the “advance payment system” (or “loyalty program” - programma loyal'nosti - as he calls it) during the last two years, by widening his existing networks of friends and acquaintances in Moscow. He pushed them to subscribe to the farm's production, which he describes as an investment - people pay for an egg, from which a chicken develops. It takes three months to grow a hen which will produce eggs. It also means that half of the hen belongs to the “creditor,” so he or she is getting the eggs with a discount (skidka) of almost 50%. These subscriptions are signed for one year with a partial prepayment made in cash. The collected funds are used to buy bird feed, pay for incubation expanses and workers' wages.

The use of “safety networks” (with a similar meaning to “social network”) in food redistribution has had a long history in Soviet and post-soviet countries, with scholars paying a lot of attention to the study of exchanges inside of these networks. Within the context of shortage, individuals and households living in socialist economies have developed all kinds of complex ways of negotiating access to scarce goods based upon networks of reciprocal exchange. So-called “second economies,” as they were referred to in connection with the “primary” socialist economy during communism and after its fall, bear a strong reliance on personal networks, interest groups, and contacts. One of the first

ethnographic analyses coming from the Soviet Union in the late 1960s was the research of economic life in a Soviet Collective Farm by Caroline Humphrey. She made several observations about the use of personal networks, namely that the fluctuations in the production and income of the kolkhoz household made people rely more on family and kin and caused the expansion of what she called a safety network (Humphrey, 1998: 298).

In case of the village in Buryatia where Humphrey conducted her research, the network partially consisted of connections formed via kinship and blood-relations. This meant that they were more diverse in terms of access to resources and individual social status compared to other types of groups like co-workers or close neighbors, and these networks were different from the official, patrilineal Buryat kin (Humphrey, 1998: 370). A household's network was widely spread, spanning countryside/town production to benefit from complementary situations in the economy. Humphrey also noted that, “the limitation on accumulation and saving have created a relative emphasis on distribution and exchange among present generations, as opposed to inheritance between generations.” (Humphrey, 1998: 370)

Ledneva later provided a detailed analysis of people's safety networks in the study of blat and the formation of the Russian “economy of favors” – again in the sense of “network analysis” as social network. This is mirrored by work in Poland on *zalatwic sprawy* and in Bulgaria on *blizki*, which point to similar sets of relations (Wedel, 1986; 1992; Begg and Pickles, 1998; Cellarius, 2004). These types of relations were and continue to be a part of people's daily life. Blat is a process of non-monetary exchange and a kind of barter. It is based on a personal relationship which involves an acquaintance or friend through whom it is possible to obtain some goods or services that are in short supply. Blat usually took place when “the money didn’t work as the main element in economic transactions” (Ledneva, 1998:33) . Sometimes blat also meant influence and protection. In short, it is a reciprocal relationship based on mutual sympathy and trust (Ledneva, 1998: 33-34). For Wedel (1986; 1992) the “arranging of matters” (goods, access, information, services) was essential under the shortage economy of late socialism when formal supply channels simply did not work. *Zalatwic sprawy* (“to arrange things”) was an accepted and everyday practice between friends and family who made up one's circle.

Caldwell (2004) also pointed out that in post-socialist Russia “survival strategies” such as the black market, trading, and barter were grounded within complicated and

overlapping networks of informal exchanges among relatives, friends, coworkers, and acquaintances. These connections crossed generations and all types of local, national, and international boundaries. People in the Soviet Union and Eastern Europe engaged through those networks in acts of mutual assistance by circulating goods, information and job contacts.

When physical money entered the economy during the “transition,” credit also became exclusively associated with one's inner social circle even in the framework of conducting business (Caldwell 2004:69). The very private nature of credit typically bypassed “formal” banking channels and ranged from smaller loans to funds for greater purchases. Debt was repaid over time under various conditions that were subject to negotiation. In turn, the practice of informal loans created a circulating system in which one’s creditors knew that they could, in turn, borrow money or other resources at another time.

Food production and redistribution were also areas where those contacts, networks and circles played a crucial role after the fall of socialism, in both rural and urban environments. A lot of literature on post-socialism concentrated on self-provisioning (Smollet, 1989; Smith, 2002; Clarke, 2002a; 2002b; Caldwell, 2004; Cellarius, 2004) and ways of distribution. Scholars referred to it as the “economy of jars” (Smollet, 1989) or the economy of “organic exchange” (Caldwell, 2004). Smith (2002) noted that part of the produced food was given to friends and relatives, and this was usually repaid in the form of material or monetary help. Similar stories were often told by my informants in Kolionovo as well:

That's how we used to live. Somehow. [...] I was also moving around, consulting here-there. But I planted all those trees myself. The whole family was feeding from the plot... Or hunting. Until now I spend no more than 5,000 rubles on myself monthly. All we need we have in storage. I make my own moonshine. I preserve meat and fish for winter. I have all this money from the ICO in the wallet (referring to the Bitcoins). It is there, so it is good, let them be. It is the same like having good people around - they are, so it is good they are, let them be. I like to do something nice and help others.(from the conversation with Mikhail, recorded 19.7.2017)

Exchange in Kolionovo, especially non-monetary exchange, was more likely to appear between people who considered themselves to be part of the circle, or “svoi.”

Furthermore, it did not seem to be strongly influenced by what was exchanged – either subsistence goods, labor or favors. Several interconnected and non-closed circuits functioned like this, expanding their distribution beyond the farm and its locality. Nevertheless, the delivery of farm products was always limited to members of the extended “circle”. Instead of contemporaneous transactions of money for goods, advanced payments were preferred. This meant that the receiving side, or creditor, paid for the products before they were delivered and often before they even existed. This was the context in which koliony, the alternative currency and later the cryptocurrency were created.

3. Post-Socialist Networks: Between Gift and Commodity

The post-socialist transformation caught anthropologists in the middle of a debate on the dichotomy between commodity and gift, which I briefly mentioned in Chapter 1 in my discussion of the morality of exchange as described by Perry and Bloch (1989). But it was Gregory (1982) who made the most clear separation: a gift is based on the exchange of inalienable objects between interdependent transactors, while a commodity is an exchange of alienable objects between independent transactors. The moral evaluation of both of these transactions is also different.

What many researchers discovered in post-socialist countries provided ethnographic examples for the non-existence of “pure gift” and “pure commodity.” An example of this is what Ledneva called *blat* (1998), an untranslatable term for a reciprocal relationship based on mutual sympathy and trust, which becomes the main element in economic transactions. Thus, it can be classified between commodity exchange and gift-giving (Ledneva, 1998:33-34). On one hand, the numerous shortages of the soviet economy meant that obtaining specific items was driven by a purely materialistic and calculative need. In these circumstances, the value of an object was based, not only on the complexity of the social transactions needed to obtain it, but also by the level of trust one had to have in the source. At the same time, delayed return (Ledneva, 1998:37) and the implicit personal relation it entailed gave non-human objects the attributes of a gift. They also had the characteristics of what Weiner (1992) defined as an inalienable possession: a non-human object which is considered to be a bearer of value. The value itself was given by what the author called cosmic authentication - a set of beliefs represented through a name and the stories attributed to the object. For example, in the Soviet economy everyone had shoes from “Maria Ivanovna,” a washing machine from, “Ivan’s friend” etc. In case of the farm in Kolionovo, the production of foodstuffs were also attributed: strawberries were “Grigory’s,” eggs were from “a babushka,” milk was from “Igor.” In a lot of cases it implied more than just a name.

Valentina, Mikhail’s mother told me after returning from the market in a neighboring

town:

”We went to the market in Yegoryevsk to sell eggs. I’m so bad at selling, you know. There was this other granny, she was so little, so destitute (*bednen’kaia*). She asked how much were the eggs, and I don’t sell like those speculants (a derogatory term used in the USSR for a profiteer) at the market. I sell them cheaper. But, she took only ten of them. I put an extra five in her basket. And there was this younger couple, they bought three sets of ten and later returned and bought ten more. I also gave them extra eggs. So they remember those eggs are from me.” (Fieldnotes, 23.07.2017)

Similarly, Nadezhda was outraged at the news that some of the trees the city of Moscow purchased from them were not needed and would be thrown away: “What do you mean they’re throwing the trees away? Those are my trees, I grew them, I took care of them every day!” (Fieldnotes, 8.07.2017). These examples of value “added” on top of what would be considered a market transaction were quite frequent. As Hann (2006:219) summarized:

[K]ey tasks in rural housebuilding were commonly undertaken by large families, neighbors and friends, without exhaustive calculation of the debts incurred. Some gifts made to individuals could be adequately classified as instrumental: the gift functioned as a payment, and there was no further contact between the parties. Others were offered in a spirit of positive reciprocity, which is not to say that self-interest was ever fully excluded, even when close family and friends were involved. Some transactions intended as simple payments led to long term social ties and the integration of new members into a ‘moral community.’

As Caldwell (1998:98) wrote earlier, “the pervasive use of informal networks in Russia challenges theoretical explanations of the connection between exchange and social relations. In particular, distinctions between gift exchanges and commodity exchanges are complicated by the personalized nature of utilitarian redistributions of goods like those in Russia.” In earlier literature, gift transactions were described as binding transactors together by obligations and expectations. It also determined when gifts would be returned and under which circumstances (Bourdieu, 1977; Mauss, 1990). For both Bourdieu and Mauss, exchanges were understood to exist prior to contacts; it is through acts of exchange that individuals initiate and sustain relationships with each other.

For Caldwell, the given theoretical dichotomy between gift and commodity did not “capture the complexities of Muscovites’ informal networks,” (1998:99). She further describes:

In particular, the idiom of friendship through which informal networks are expressed disguises the extent to which displays of giving represent pragmatic distributions of material goods, as well as calculated evaluations of the recipient's ability to reciprocate at a later time. More important, the possibilities for exchange emerge only after social relations have been established. Thus social relations precede offers of assistance and requests for help. Acts of exchange verify and concretize existing social relations and the trust that exists between partners.

While the spontaneous transaction between unknown actors could include a gift, the creation of a relationship between humans often had a pragmatic and quantifiable motivation which was not perceived by the actors as wrong. The exchange that followed was necessary for strengthening that relationship and contributed towards the creation of trust.

In more recent literature, Humphrey (2012) comments on the negative connotation attributed to Ledneva’s term “economy of favors,” which was mostly used to describe corruption. In this regard, she concentrated on why certain actors preferred to solve some problems in this particular way, (Humphrey, 2012;24) arguing that “performing an action as a favor adds a 'gratuitous' extra to any practical function it might have and turns the act into something that is incalculable. This is a moral aesthetic of action that endows the actors with standing and a sense of self-worth, and I shall argue that the 'personal connections' in question are in fact the circles that provide the recognition on which self estimation depends.” Ledneva also noted in her later work (2011) that most of her informants preferred arranging mundane business activities through a combination of widely used favors and other people as opposed to businesses. She argued that it gave them a feeling of trust which was missing from their relationship with institutions.

Several attempts have been made to look at this condition from a different angle, highlighting the fact that these networks were formed around a specific set of material goods. Researchers observed that old safety networks through which any type of material substance would pass often started to “fall apart” or separate when money entered the established circles, as every transaction that was previously conducted exclusively in terms

of blat started to require a monetary addition. On the other hand, every material and monetary exchange still required a personal connection - this was also true with respect to cash as well because its limited fungibility persisted during the transitional period. Alaina Lemon (1996) elaborated: “it was not only money as an abstraction, but the bare physicality of cash entered [the] lives of people and continued to be inseparable from widespread models of the social networks.” Lemon shows how cash, especially dollars, became a “physical symbol connecting links in particular human chains of exchange.” (Lemon, 1991:45) The types of currency in use, foreign or domestic, led to what she called “currency apartheid.” It meant that the type of currency used, and what someone could get in return for it, became characteristic of specific social groups. It also led to an obsession with dollars that bordered on fetishism, which was expressed through adoration, “expertise on authenticity” of its insignia, or even its use for aesthetic evaluation, as suggested by the name of Lemon’s article “Your eyes are green like dollars.” These patterns were explained by Lemon through Simmel's notion of aesthetic pleasure born by watching one's fortune - that of extending the self's imaginary powers (1991:326). In the case of post-soviet societies, it was the future power of consumption. This time, the circles were considered to be formed around specific resources. Cash, for its scarcity, was one of them. As one of Ledneva's (1998:154) informants commented “in the new distribution system, where land and resources were distributed like sausage and cars, the effect of connections is a hundred times stronger.”

It is possible to claim that the aforementioned “economy of jars” (Smollet, 1989) or the economy of “organic exchange” (Caldwell, 2004) sparked a similar fetishization with regards to farm production. First, it was romanticized together with the “countryside” and the peasantry. As Caldwell (2011) described, the preoccupation with “peasant food” was pervasive across Russia’s natural foods movement, where numerous brands bore names which were variations on “Little House in the Village”, “Granny's House” and “Beloved Garden”. These brands offered access to “tradition” in the form of association with an “authentic peasant lifestyle” which had little to do with actual subsistence farm production. Restaurants followed the same pattern, but offered a more visceral experience, and served “Russian” food available everywhere (vegetable-based soups, blinis, pelmeni), but presented it in an “authentic peasant” environment, with interiors covered in wood, vintage farm implements, taxidermied farm animals, dishes described as “peasant” or named after historically significant villages or figures from folklore. Today those restaurants can still be

found. However, there is a growing countermovement, with some shops and restaurants offering, “real” or, “certified” farm products. For example, in LavkaLavka all products are attributed to their producers, such as, “chicken from Andrei Ovchinnikov, milk from Natalia Kozlova” etc. Even the farmers themselves were caught up in the nostalgia. Mikhail expressed plans to build things in a “traditional” village style, or to make things as they were done centuries ago: “If Grygory brings his fish, we can make the Tsar's ucha. It's a forgotten recipe for a fish soup prepared in a rooster broth. Before, you know it, the revolution.”

The embargo on foreign food imports to Russia followed the annexation of Crimea in 2014 and served as an “activation” of local production which intensified this trend. While this caused an increase in the number of state-funded producers, it also motivated a lot of urban inhabitants to re-establish connections to the villages. This was facilitated by contacts to rural areas that many people still maintained and was partially due to a long history of urban-rural Russian connections, including dachniki and domestic food production. One day, as I was sitting in my friend's kitchen in Moscow, I listened as she washed and cleaned two young chickens “from the farm.” She explained how she encouraged people in the village to buy cheese and eggs from her farmer friends, as it was harder to buy good quality products in the supermarket and the prices were higher there.

As Mikhail once explained to me, “everyone needs to eat, and if it is homemade, from the countryside, from the farm, it's even better.” I asked about the risks of bad weather or disease from the chickens. “I sell trees. You plant the tree and it grows regardless. It needs a lot of care, of course, but weather is not its problem. Birds are a little more complicated. We take all measures [of precaution], but no antibiotics or anything like that.” When I asked about veterinary control, he said, “People who want it should go and buy chickens previously bathed in chlorine from the supermarket. Those, who order from me, know me and know I will not poison them or sell crap. And, if it's cheaper compared to the shops, people will want to buy it. And to make it cheaper is very easy without banks and mediators. If people would trust the quality, you can solve this problem out of retail... And, Bitcoin, or your own token, doesn't include the price of chicken Crimea, Olympics and the war in Syria, on TV... The First channel - all those expenses for the state budget.” Mikhail wants to include more products from neighboring farmers in his offerings, and make Kolionovo “a brand you trust.”

To get his products, customers contact Mikhail and “arrange” it (dogovoritsa) by writing him online, buying cryptokolions, or subscribing to farmer’s baskets. “The ones who did are all happy,” he says. In Kolionovo, distribution and contact with the outer circle was organized in two week cycles. This logic is partially motivated by the character of production itself, as Nadezhda explained, “Cheese and milk are ordered in advance as they're the most perishable. Sometimes Igor doesn't make some types of cheese. Chickens, on the other hand, should be cut, plucked and gutted... It all takes time. The rest depends on how it grows... This year you saw, the weather was quite bad.” This is one example of “scheme construction.” In this case it is not entirely monetary, but through the addition of one more element, for example rabbits, the monetary comparison becomes clear. As rabbits have a quantifiable ability to multiply, it is easy to make an analogy between rabbits and the multiplication of money, or in this case, tokens. What was discussed is that the multiplication algorithm is realistic enough to convince investors, more specifically the ones who would prefer not enter the scheme in the first place, by introducing the investors to the people behind the scheme. Distribution at the farm was performed according to a similar principle. Besides the fact that “subscribers” trusted Mikhail with managing their investment, they also had confidence in the multiplication algorithm – the fact that chickens will produce chickens. Later, the paper tokens were added to circulation, which triggered the prolongation of the network by the addition of new agents. This, in turn, makes it impossible to predict the outcome – either the scheme will crash at some point or something in the network will ensure endless circulation and guarantee the, “closure” of the circuit's proper growth (next chapter). The receiving side also contributed to mitigating some of the risks, “svoi podozhdut, drugie ne budut zhdut,” or “Ours will wait, others will not.” Therefore, as noted before, the pre-existing relationship was more likely to facilitate the continuation of the exchange.

On one of the weekends during my fieldwork, two cars arrived at the farm and parked outside of the hospital. Mikhail welcomed the visitors, two men and a woman with a child, who came from Moscow and were curious about the farm. The men were “working with cryptocurrencies” and also wanted to buy some products “for their kid.” Mikhail said he'll see what he can do. Nadezhda approached them and Mikhail said, “Look, they want our products, but are 'cutting the queue,' what can we do about it?” Nadezhda said they usually only accept advanced orders and asked what type of products they wanted. They said eggs, chicken, milk and cheese. Nadezhda explained the complication and called Igor. Luckily,

Igor had milk and cheese ready for sale and Nadezhda could drive to pick it up. The men asked if they should pay her in kolions. She said they should pay as they liked and that kolions were Mikhail's thing. At the same time Mikhail stressed that was “an exception” as others sometimes had to wait for farm products for up to half a year; he would kindly sell them products on that occasion, but next time they were supposed to order in advance or get kolions. Investors who had purchased tokens in April were on a half a year waiting list, as was everyone else taking part in the process of “investing” in an egg, growing it into a chicken and subsequently getting eggs from that chicken as a return. But in this case, the simple transaction of acquiring cheese and eggs ended up looking like a great favor. On other occasions, visitors asked Mikhail about the launch of his ICO and the Bitcoins he'd collected. Mikhail later complained that he was tired of these kind of visits, when people were interested in how his ICO brought him 400 Bitcoins (srubil babok) and wanted to purchase products from the farm on top of that. I asked why he thought it was wrong and he said that it just “didn't work like that.” (Fieldnotes, 23.07.2017).

This situation was juxtaposed by a visit that happened several days earlier. Two people arrived from Moscow to install a cryptomat they “had been expecting every day” since May. A cryptomat is a machine which enables the exchange of fiat currency to cryptocurrency. A person inserts a specific amount of cash which is converted into cryptocurrency based on the rates from one of the crypto-currency exchanges. The generated QR-code can be scanned by the recipient in order to import the acquired cryptocurrencies into his/her wallet. Mikhail purchased a cryptomat for rubles from a person he knew in the “crypto-community” in Moscow, and whom he considered to be a good acquaintance. This person was the owner of a cryptomat business and he arrived in Kolionovo accompanied by a technician to install the machine. Immediately after his arrival, Mikhail's acquaintance began to run around the farm with his camera, filming everything and requesting to see “the legendary crypto-chickens that were, 'mining eggs.’” The installation took more than several hours because of the poor internet connection and when the technician drove away, Mikhail said they had to celebrate the completion of their first transaction with his acquaintance. He called Glavnyi and asked him to bring moonshine from the storage. They talked a lot about the events in the crypto-community, the situation with ICOs, Bitcoin and other projects. Slava returned with a carafe and several jars of pickles, “babushkiny” (from the granny), and while the cryptomat software was being installed, Glavnyi, Mikhail and Mikhail's acquaintance finished the alcohol. The

visitor kept complimenting the moonshine and Mikhail told Slava to bring another bottle. He also said that it was just a sample and that his guest could subscribe to the “farmers’ basket” if he wanted a regular supply together with other farm products. At this point, Nadezhda appeared with another bottle in hand, but very angry. Mikhail said that she shouldn’t be angry as he found her another subscriber, “Meet Vladimir, a 'crypto-millionaire,' who lives close to our apartment in Moscow and he wants to subscribe to our farmer’s basket.” Nadezhda argued with Mikhail for staying up and “talking nonsense” with his guest saying she should “crypto-kick” everyone in the room (kripto-liulei nastavit). But, she also said that this was a matter that should be discussed when people were sober, and asked Vlad if his intentions were serious and they exchanged phone numbers. In this case, the moonshine and pickles served as a favor that facilitated the establishing of a relationship, which could potentially lead to more potential exchanges (Fieldnotes, 21.07.2017). Several days later, two other friends from Larinskaia, both former Muscovites living in the village, paid Mikhail a visit. They met while organizing a protest against the construction of a junkyard near their village. At the end of the visit, one of the men said he would love to get some moonshine for his son. The exchange went through without complication. Nadezhda brought two plastic bottles filled with two different moonshines, the guest tasted both and decided to buy them with standard currency (25.07.2017).

More and more people were driving to Kolionovo from different parts of Russia to meet Mikhail, ask about his ICO and how they could emulate it for their own projects. These people usually came in groups of two or more men. Most of them brought food for grilling, alcohol and other presents. The visits were usually arranged via the internet and Mikhail always told me when there would be guests at the farm and invited me to join. During one of these visits, I was returning from the forest with several buckets of wild berries that I had collected with Valentina. Mikhail introduced me to two men who were “involved in the oil business.” One of them saw the berries and asked where he could buy some. Mikhail said they usually make jams or dry them and make them part of their farmer’s baskets, but these were from Virginia so they should ask me if I was willing to sell them. I replied that I had more than I needed and gave them one of the buckets. One of the men thanked me and said that his kid would be very happy. Meanwhile, Mikhail jokingly scolded his guests for having brought him expensive vodka when they were instructed to bring the cheapest port wine they could find. He insisted they drive to the shop in the

neighboring village to get it. I asked to join, as I was curious to listen in on their conversation and I wanted to buy more cigarettes. At the shop, Mikhail showed them the port wine he wanted. As I approached the cash register to pay for several packs of cigarettes, Mikhail intervened and exclaimed, “What are you doing? Our visitors are getting this. They're our sponsors for today!” The visitors loudly agreed and paid for the alcohol and cigarettes. In the car on the way back Mikhail added, “You also gave them a present, your berries.” At first I was confused with these arrangements, as it was often the case that some of the presents from the visitors were given to me or Glavnyi. Once before, during another visit, Mikhail told me, “Today a man I know will bring a friend, who teaches at the university in Moldova. He wants to do something with cryptocurrencies, maybe even open a faculty for digital economics. I could ask him to help Glavnyi’s daughter gain entrance and get her a state-sponsored seat in the university for my consultancy.”

Curiously enough, these favours never went the other way around or got mixed up with the farm's activity. With the exception of the “berry present” and the group who “cut the queue,” visitors never asked to purchase anything even though they were curious about the farm’s production. Furthermore, Mikhail never offered any of his products during these discussions, and always added that “farm-food is only available through advance payments,” which never escalated to further talks about “arranging” these payments.

The examples above emphasize the ambiguous character of transactions performed at the farm. This complex in-between state has been left suspended as a “neither or nor” by scholars because of the unlimited number of combinations that occur, especially when abandoning the binary frames of gift-commodity and human-nonhuman actors. At the same time, the circulation of favors, material objects and information had an identifiable rhythm and logic. Foodstuffs were always attributed to either an abstract set of values (“authentic peasant”) or to a “real” person, who put effort into creating it and whose name appeared on the end product. This attribution also facilitated trust. In the inner circle, transactions were both monetary and non-monetary, but each had an “added value.”

Analyzing the pragmatics of Ithaca Hours - one of the alternative currencies which started in the U.S. as a countermovement to capitalist money, Bill Maurer pointed out the prevailing calculability behind it: “the equivalence-function conjure the spirit of transcendental value in order to hide a real spirit of value - labour - and replace it with [a]

sublime [value].” (Maurer, 2005:113). These currencies are organized around the same principle of equation as used with state-issued dollars. As a consequence, these alternatives end up mirroring the principle against which they were created because they appear in the frame of exchange with a pre-supposed reciprocity and some sort of equivalence. I will argue further that this equation, as a principle, is not completely missing from post-soviet “alternatives,” but it also does not hold a central role because of the soviet heritage.

There is another “monetary” phenomenon whose appearance coincided with the growing availability of cash in the lives of people during the post-soviet transformation. I will refer to this phenomenon as “scheme finance,” as illustrated by several important examples on how post-socialist actors dealt with finance, including various “pyramid” and “Ponzi” schemes, but also rotating credit associations (ROSCAs). These schemes are often referred as “embedded finance” (Maurer, 2013). The most revealing example of this in post-soviet Russia was a company called “MMM,” which started in 1989, drew up to ten million depositors and finally collapsed in July of the same year, but continued in different variations until the recent death of its initiator, Sergei Mavrodi (*Radio Free Europe*, 2018). This case was not closely examined by anthropologists. An organization operating with a similar model in Romania, however, which managed to involve nearly a third of the country's population, was studied by Verdery (1996:168-203).

The mechanics behind the aforementioned “pyramid” from the 1990s are simple. Individuals who wish to join should make a monetary payment. For this they are promised a share of the money brought by every additional member they recruit. The initiator of the “pyramid” also receives a share of these payments, thus all existing members have a strong incentive to continue recruiting. The “pyramid” can be described mathematically in terms of exponential growth, as each level is much larger than the preceding one. It would have to expand indefinitely to “make money,” which is obviously impossible due to the simple fact that the population of the Earth and its resources are finite. And, when the process runs out of new recruits, the structure collapses under a lack of additional revenue sources. Similar to a geometric progression series, where the biggest terms are at the end, the majority of members are in the “bottom levels of the pyramid” and will not receive anything from their contributions. Thus, most people will not have had any opportunity to profit from the scheme even though they paid to join it, while a handful of people, primarily the ones who started the scheme, will end up making money.

Another similar scheme takes its name from the businessman Charles Ponzi, and is based on the “domino effect” where early investors are paid their returns through the contributions of new investors. A human, or entity, in the middle of the scheme will take money from a person who joined later, keep a percentage of it, and give the rest to earlier investors. Because this model aims to enrich only a minority of participants, it is considered to be fraudulent, or a “scam,” and is forbidden by many governments.

Some of these schemers chose moral or divine attributes for their modus operandi. For example, a Ponzi-like organization called “Women Empowering Women,” which appeared in the UK, referred to themselves as “gifting circles” where the individual monetary contributions required to participate were being “gifted” to “the network of women.” (McVeigh, 2001) This was similar to what Verdery described in Romania’s Caritas “pyramid,” which positioned itself as a “mutual aid game” whose rhetorics appealed to Orthodox Christian tradition and nationalism. The whole mechanics of “money making money” was attributed to a sacred power gifting its divine blessing to the Romanian nation. Verdery explained Caritas as a “technology” in Foucault’s sense, “for new economic conceptions, one[s] that fostered change in people’s ideas about economy toward a market sensibility” (1996:183) – not the only an “instrument,” but the most widespread instrument of all. According to her, the “pyramids” came as a shift from socialist planning economy and became critical for the realization of “how the money works.” It served as a necessary tool for people to detach labor from money, “producing an abstract sphere in which money circulates and multiplies without clear agency.” It enabled “the economy” to become an impersonal, unregulated social fact, something to be taken for granted because it worked. To paraphrase, “pyramids” served as a way “to feel the invisible hand” in the transforming economy.

Smoki Musaraj’s analysis (2011) of pyramid schemes in post-soviet Albania argued that the bare materiality presented by the stacks of cash which flourished in the country as a result of widespread emigration, speculation from smuggling, and state workers’ savings, contributed to the emergence of Ponzi and other such schemes in its post-socialist economy. Furthermore, she argues that they were not simply a result of “capitalist innocence” or “naiveté,” as they were often interpreted in the West. Musaraj suggested that these schemes were a “translation in Latour’s sense,” (2011:91) and that participants, “creditors”, made use of established networks and practices of “reciprocal exchange” cultivated in the socialist economy of favors to “translate” these networks and practices

“onto new geographies of wealth formation,” which gave them the “role of the mediators in a transition from socialism to neoliberalism, practices that actively shape new business practices that combined socialist forms of entrepreneurship with [the] particular politics of [the] privatization of the state.” Both Musaraj and Verdery treated pyramid schemes, from an “evolutionist” perspective, as a “tool” for switching into something else, something more “capitalist-normative.”

In addition to the schemes mentioned above, post-socialist countries also utilized another widespread model, which is still active today in different parts of the world. It is called ROSCA (Rotating Credit Associations) and it has received a similar theoretical “treatment” to “pyramid” schemes. Similar to Musaraj, Clifford Geertz identified rotating credit associations around the world as a “middle rung” from an agrarian, peasant society to a trade-based one, and pre-supposed that they will turn into banks at some point (Geertz, 1962). Shirley Ardener broadened the definition of rotating credit associations, as it appeared in the same form in different societies, defining it as “an association formed upon a core of participants who agree to make regular contributions to a fund which is given, in whole or in part, to each contributor in rotation” (Ardener, 1964: 201). They can only be formed for a limited time period, in order to assist participants in saving towards a goal. They can also be used for specific expenses, such as funerals. Sometimes with time they even become semi-institutionalized, with the manager of the fund acting more like a community banker. There is a great variety of ROSCAs, but they often differ in whether all members receive equal funds or not, whether all members pay identical contributions or not, and whether contributions remain at the same level throughout or they change (Ardener 1964: 214). ROSCA-like organizations can also be operated by a state or formed to articulate an ideology, like in the case of the Caribbean susu, a self-conscious use of an African-derived name as a form of post-colonial resistance (Besson, 1995:277). There are more variations of ROSCAs existing in different locations and different contexts.

Maurer (2013) pointed out that ROSCAs are not purely “economically pragmatic” but are often associated with solidarity and mutual help, as opposed to “pyramids” and Ponzi schemes that are perceived as frauds and scams. Despite the fact that they seem very different in output, there are many similarities between ROSCAs and “pyramids”. Both consist of humans, money and information, which means that if every participant of the “pyramid” would reinvest the interest that she received, the “pyramid” would become a closed “circuit” similar to the ROSCA model. Verdery (1996) also mentioned ROSCAs

when explaining the popularity of Caritas in post-socialist Romania:

”One was a fund provided by the firm, from which its employees could borrow significant amounts from time to time, repaying at no (or very low) interest over a lengthy period. This was known as C.A.R. (from the Romanian for ‘mutual aid fund’), its three initials interestingly echoed in the first three letters of ‘Caritas’ and its meaning resonant with Caritas as a, ‘mutual aid game.’ The second was a fund created by small employee contributions, where each employee has the right to harvest the entire fund on occasion for major purchases. Crucial to both forms was that they were closed circuits, used only by workers of the firm and rotating a fixed sum whose limits were set by member contributions or by the firm itself. Many who later deposited in Caritas, believing it paralleled these workplace forms, did not see the critical difference. Unlike those forms, Caritas was not a closed circuit with fixed amounts but an open one with theoretically unlimited participation. Perhaps it was Romania’s long experience with these two workplace funds that disposed them to embrace Caritas so readily, and so innocently”(Verdery, 1996:176).

Hence, the morality problem is connected to trust in humans and in the mechanics of the scheme itself, as it is often impossible for participants to say whether they are part of a, “closed circuit” or an “open” one.

This is why the schemes’ geometric “forms,” either, “pyramid,” “domino chains,” or “circles,” appear only later and usually following a “crash” which reveals a “fraud.” Many of these schemes do not appear to be fraudulent in the beginning, as was the case with the “Great Plantation Scam” that took place in 1990s India. The Anubhav teak plantation scheme, which at some point was the leading agricultural producer in the country, was praised by the media for its success. Anubhav investors were offered teak certificates and shares. These investments were marketed under different complicated schemes that started to give returns each year. This seemed to be functioning for years until it collapsed, “unveiling” the Ponzi scheme underneath (Icmrindia.org, 2018). If we consider the moment when participants join, either by another human invitation or via a cash contribution, they have their own interpretation of what they are taking part in. Not all of them are “naive” in the sense that they think they are contributing to a “mutual aid fund” or “safe investment” which ends up being fraudulent. In each case, the decision is always based on trust – either in humans or non-humans who are already inside the algorithm or the mechanism itself as

they imagine it.

This mechanism is related to money's ability to multiply, which was often credited with a life-like power. Money itself was endowed with fertility – money “breeds” money, as for Marx, “capital appears as a mysterious and self-creating source of interest — the source of its own increase. The thing (money, commodity, value) is now capital even as a mere thing, and capital appears as a mere thing. [...] Money as money is potentially self-expanding value and is loaned out as such — which is the form of sale for this singular commodity. It becomes a property of money to generate value and yield interest, much as it is an attribute of pear-trees to bear pears...” (Marx, 1894; 1996, original emphasis). The objects of exchange are as likely to be fetishized in non-capitalist societies as they are in capitalist ones, and the ubiquity of “pyramid” schemes during the post-soviet transformation can be explained through the fetishism of money as a preliminary phenomenon leading to the fetishism of commodities, as was shown in the extreme by the “dollar fetish” described in Lemon's ethnography (1996). Moreover, money has both materiality through the physicality of cash and material agency given by numeric value – an ability to multiply and move as fast as bits of information. The material agency is activated through movement by human or non-human agents – that is how the multiplication effect is reached. Even more, the material agency of money can be activated even when its physicality is untouched - with external factors, e.g. inflation. Hence, why geometric finance schemes can be viewed as assemblages of money, humans and information through which a specific movement appears.

Multiplication can be reached in different ways and depends on the character of the movement – distribution, allocation, proliferation, etc. It can be reached through the mechanics of the aforementioned schemes or, for example, by distribution from the farm. Agricultural production and money bear not only a metaphorical connection – they can intervene to create new imaginaries.

One day some guests arrived at the farm. They had a business plan in agriculture which involved starting a rabbit farm, and were considering different ways to see a return on their investment, including launching an ICO (Initial Coin Offer) similar to cryptokolions. Their idea was “to attribute one token to each female rabbit, and this token would be sold to an investor.” They came to ask Mikhail for advice and later returned for a second time, bringing, as usual, treats and alcohol. I was invited to join and had a chance to

record some of their conversations. (Recording, 17.7.2017):

M: You have this amazing story, other visitors yesterday were really jealous when I told them. You have those rabbits, which themselves are a beautiful idea. In your proposal I would show this story about progression, [and] multiplying rabbits [...] It's more important... than mentioning the promise of return. If you show this legend, how bunnies can fill the whole planet and will be able to feed everyone...

R: But, we shouldn't promise any return, right? Like a, “virus” effect?

M: Rabbits will give you a return. You will keep your honesty (chestnost'). You will stimulate the motivation of your investors.

R: So they will be motivated by the speculative story?

M: The geometric progression will attract them.

R: No, but the geometric progression will attract them with the possibility of speculative growth?

M: Yes, that is later, when you start exchanging the token.

R: So, we don't say that we will buy, or that we give back.

This is one example of “scheme construction.” In this case it is not entirely monetary, but through the addition of another element into the network - rabbits. As rabbits have a quantifiable ability to multiply, it is easy to make an analogy between them and the multiplication of money, or in this case, tokens. What was discussed is that the multiplication algorithm is realistic enough to evoke trust in investors, more specifically the ones who would not enter the scheme as they do not know the people behind it well enough to trust them. Distribution at the farm was performed according to a similar principle. Besides the fact that “subscribers” trusted Mikhail with managing their investment, they also had confidence in the multiplication algorithm – the fact that chickens will produce chickens in Mikhail’s view provided a solid argument that could not fail. Later, the paper tokens were added to this circulation, which triggered the prolongation of the network by the addition of new agents. This, in turn, makes it impossible to predict the outcome – either the scheme will crash at some point or something in the network will ensure endless circulation and guarantee the “closure” of the circuit - which I discuss in the

next chapter.

Considering a reciprocal factor, none of these schemes are designed to produce returns for participants, not to mention “reciprocity”. Although they are often promised some “returns” in the form of an “added value”, discount or other beneficial aspect to their initial payment, these returns are not equated in a way that input would equal the output in either “fraudulent pyramids” or “mutual-aid” ROSCAs. My argument for ROSCAs not bringing equal returns comes from looking at them from an atemporal perspective. If they stop being schematically perceived as “circles” (e.g. one day one participant gets all the contributions of other participants and starts giving the sum back in parts until he gets them again), then the sum a participant gives once does not equal to what she gets once her turn comes. If we take into consideration that their mechanics are “unveiled” post-factum, we can consider these formations to be cascading sequences, ones that do not equate at any point.

When theorizing about socialist economy, Katherine Verdery (1991) also proposed the term “allocative power” to characterize socialism as a “bureaucratic apparatus” that operates according to the principle of “rational redistribution”, that is a “drive to maximize redistributive [or 'allocative'] power.” Under this “supply— constrained” economic system “what counts most in the competition among social actors within allocative bureaucracies is inputs to one’s segment, rather than outputs of production” (Verdery, 1991:80). In other words, every entity (actor) was trying to attract the majority of inputs while neglecting the scale of the outputs. These “inputs” were later redistributed, manipulated or just hoarded. It is hard to make parallels between the pragmatics of socialist redistribution and geometric finance schemes, as both these mechanisms are highly abstract descriptions created post-factum. The analogy is complicated further by the fact that Verdery herself did not make such a parallel while explaining Romanian “pyramid” schemes in her own article. Nevertheless, I would argue that the mechanics of socialist redistribution continuously resonated on different levels with every multipliable object that entered it, including money. This does not mean to say that there is a causality between “the emergence” of these schemes and socialism. Rather, the point is related to the character of movement through which multiplication, the “added value”, appears when the object is given away or otherwise moved. In case of subsistence goods the “added value” is what can bear the signs of a “gift” or “favor”. Similar to geometric finance, this has nothing to do with the principle of “reciprocal exchange”, but is part of a “self-expansive” practice. This does not mean that

returns are excluded - they are insignificant or rarely “disciplined” to the point of equation. That is why exchanges often appear at the intersection of different entities’ distributive networks, which tend to close into the “circles” between humans who already know each other.

The absence of equivalence in exchange, money as a commodity and a “self-expansive” redistribution mechanism, anticipate the emergence of “alternative currencies” and their mechanics in a post-socialist context. While describing the historical development of multiplied currencies-commodities in West Africa, Guyer (2012:2219) noted that “a novel good, practice, crop variety, or currency type was brought into scalar and exchange dynamics by giving it a new identity that both differentiated it from existing goods and also grouped it into an existing class. The users then selectively applied existing knowledge and social templates to the question of how that good or currency would enter into regional and local circulation.”

The exclusive use of general-purpose money to initiate these “schemes” poses another problem: although it can be a commodity, money cannot be personally “attributed” long-term unlike other objects. They can only be given as a one-time “gift” “from someone” in a single transaction (Perry and Bloch, 1989) but do not have the capacity to keep this quality when entering circulation in their general-purpose form. The spell of “gift-contribution” in monetary form is lost as soon as the money is spent – it cannot have the quality of the Weiner’s “inalienable possession”(1992). While talking about the multiplication of money, Marx notes that the process of “money making money” results in the fact that it “no longer bears the birth-marks of its origin...the result of the entire process of reproduction appears as a property inherent in the thing itself. In interest-bearing capital, therefore, this automatic fetish, self-expanding value, money generating money, are brought out in their pure state and in this form it no longer bears the birth-marks of its origin. The social relation is consummated in the relation of a thing, of money, to itself. Instead of the actual transformation of money into capital, we see here only form without content” (Marx, 1996:266). In case of some “pyramids” like Caritas, money which was given to the mechanism was initially attributed – people’s initial investment was “their” money, whereas interest was perceived as “the pyramid’s” (or even “Stoica’s”- the initiator of Caritas) money. It created a different fungibility and morality attributed to the “origin” of money. Verdery explained it by the exclusive bond of money to labor as proper or honest during socialism. Further “re-investment” into the scheme blurred the moment of

attribution, which meant that money lost its “personal” character in the mechanism’s cascades, which also contributes to the loss of the “self-expansive” aspect of giving.

Based on the literature discussed above, in post-socialist economies, the material agency of money, subsistence goods, and agricultural production are activated under specific conditions in the following way: people select to use the multiplication abilities of these entities and incorporate them into “self-expansive” cascades. This is why taken as separate cases of exchange, these transactions seemed to be confusing, as they fell into the “in-between zone” of gift-commodity. Furthermore, these individual “cascades” seem to deal with the principle of “reciprocity” only marginally, but depend largely on human contact. I also speculate that this mechanism borrows from the socialist allocative and redistributive practices, which contributed to “geometric finance scheme” and other “schematic” imaginations. Human agency in these schemes is driven by the notion of trust, which is expressed both towards another human or the mechanics of the scheme itself.

4. How Blockchain Came to the Farm: Closing the Circuit

In this chapter I will take a detailed look at another form of contemporary scheme-making, which emerged at the farm prior to my fieldwork: the creation of the farm's own currency.

4.1 What are cryptocurrencies

Cryptocurrency is a purely 21st-century concept, which combines the “crypto” prefix and the English word “currency”. The first stands for “obscure” in Latin and refers to the cryptographic protocol first used by Bitcoin to eliminate the “double spending” problem that often occurs in digital cash transactions, which are based on bits of information that can be easily copied and reproduced (Nakamoto, 2018). Cryptocurrencies are digital tokens that exist within a specific “cryptocurrency system” consisting of a “peer to peer network”, consensus mechanism and a public key infrastructure. The system is run by a set of rules which define what constitutes a valid transaction, while also specifying the total supply of digital tokens and their issuance scheme. These rules are enforced by all participants, who are also referred to as “nodes”. The entire transaction history can be independently verified by each node as everyone has a copy of the shared ledger. This shared ledger is composed by blocks of transactions that are chained together (“blockchain”), and are constantly updated by a process called “mining”. This process ensures both the addition of transactions to the blockchain and the issuance of new units of cryptocurrency.

Bitcoin was not the first digital currency or token - several cases predated it, including tokens used in video games. Bitcoin was, however, the first one to use “blockchain technology”. Furthermore, this technology received a strong ideological backing - trust “incorporated” into the code, which “should replace any mediator” in any transaction made with Bitcoin. Nakamoto, the alleged creator of Bitcoin, was highly concerned about depending on a third party for electronic financial transactions because of high transaction costs for small amounts of money, the need to trust an intermediary for the execution of transactions, and the reversibility of payments. His solution relied on the fundamental function of Bitcoin's protocol, the development of an “electronic payment

system based on cryptographic proof instead of trust.” (Nakamoto, 2018). For Bitcoin to work, one does not have to trust Nakamoto, a bank, or any other person or institution. One must simply *trust* the *code* or, more precisely, the cryptographic *algorithm* (Maurer, 2013:4). Together with a widespread shift towards the digitalisation of cash in national economies, money has become expressed as value on accounts and the exchange of state-issued money for “virtual” tokens was expedited. In very simplified terms, all of these virtual tokens could be initially purchased as “commodities” in exchange for digitalized national currencies, and the speculation started. After Bitcoin, which is currently the most popular and expensive cryptocurrency, many alternatives have appeared with their own blockchains. These are referred to as alternative coins (altcoins), and are multiplied tokens on the same blockchain with different names. Virtual kolion, or crypto-kolion, is one of them. The approximate number of altcoins which have appeared on various exchanges at the time of this writing is around two thousand (Coinmarketcap.com, 2018).

Now, ten years after the appearance of Bitcoin, cryptocurrencies are still viewed more as a digital asset than a currency, more specifically as virtual *objects with value* rather than a medium of exchange (Hileman and Rauchs, 2017). Numerous algorithms are used to guide transactions, mining, and speculation with those assets. Besides the tokens themselves, the creators of Bitcoin also introduced the term “cryptocurrency ecosystem”, the idea that a cryptocurrency will galvanize a community around its usage as a currency. Though it is based on a peer-to-peer exchange model, it is the “code” of a cryptocurrency and not the parties involved in the trade who participate and validate the transaction itself (Maurer, 2013:4), making the system an assemblage of human and nonhuman agency. As a famous quote by one of the developers of blockchain states, “on the blockchain no one knows you are a fridge” (YouTube, 2013). The term “ecosystem” was also loosely used at the farm when referring to Igor and other participants in the distribution network who contribute to the creation of the “farmers’ baskets” or adhere to the usage of cryptocurrency.

The materiality of every cryptocurrency, including kolion, is primarily constituted by their “code”. The “crypto-” version of kolion emerged at the farm following the printed token, whose story attracted the founder of a platform called Waves, a “blockchain” base that enables people to “issue” their own tokens. As described by Mikhail, the creation of kolion on the Waves blockchain was done as a *mutually supportive act* – this platform offered him their work and code in exchange for him mentioning them and promoting their

“wallet” while talking about koliony. A team of programmers incorporated the issuance of 400.000 tokens named kolion into their network. These tokens were then offered by Mikhail to “investors” as a crowd-sale. When asked about why he hadn’t chosen direct crowdfunding and why he had to “create” his own tokens, Mikhail answered that no one would give money to a simple crowdfunding, because “no one in Russia has money”. Creating a digital token that can be purchased using other cryptocurrency helps collect funds from all over the world.

4.2 Naming and movement

The predecessors - printed koliony - were resting in a garage at the time, with some “lucky” ones *travelling the world* after being sold to collectors via the Internet, in all denominations and with Mikhail's signature. He also claimed that some of them were sent to a museum.

The name “Kolion” was not only given to money, but also to the two dogs who were raised at the farm, one of which was the farm’s guard dog while the other was living in a neighboring village after having wandered off. When asked about why they had given their dogs the same name, people at the farm replied that “they are not the same. One is white Kolion, and the other is black Kolion. But everyone knows where they are coming from”. Kolion was the usual name given to anything that had *multiplied* at the farm, including currency and poultry. The name-based attribution to a specific place was similar to the one discussed in the previous chapter when looking at the naming of subsistence goods. This naming pattern resurfaced at the farm in the other direction as well: the introduction of cryptokoliony created a bond between specific items and marked goods which were acquired using funds gathered from the issuance of the cryptocurrency. If, for example, resources from token sales were used for acquiring new seeds, eggs or equipment, these items were automatically nicknamed using the “crypto-” prefix, like “crypto-tractor” or “crypto-ducks”.

”I sent you some koliony, but don't spend them. You should wait” Mikhail told me. When I asked about how I could spend koliony, he continued: “On the exchange, but don’t exchange or sell them yet. Wait until they will be listed on one of the cryptocurrency exchanges. I will need your help then. Every month each holder of koliony will also be receiving dividends, 1 per 100. Those bonus dividends you can spend right away on our

production.” I wondered why I should not spend my koliony right away on products from the farm. Mikhail later explained that after koliony will appear on the *cryptocurrency exchange platform* (where they were not yet listed in July), he will need me to sell and buy them so that the currency *stays alive*. On the other hand, the dividends were added so that investors would not spend their cryptokoliony until they officially get to the exchange, meaning they would be motivated to hold them.

To understand why investors would purchase such a token in the first place, I will take a little detour to shortly explain how cryptocurrencies and their exchange work. Evidence exists that, at the time of this writing, the main use for cryptocurrencies is speculation (Hileman, Rauchs, 2017). A 2016 joint report from Coinbase and ARK Invest - the most popular crypto exchange websites - estimates that 54% of Coinbase users use, for example, Bitcoin, strictly as an investment. Global Bitcoin trading volumes have been significantly higher than network transaction volumes, a figure that is even higher for most of the other cryptocurrencies. However, it is noted that a rising number of cryptocurrency transactions are not performed on-chain (i.e. directly on the blockchain network), but off-chain via internal accounting systems operated by centralised exchanges, wallets and payment companies. These off-chain transactions do not appear on a public ledger. It is also possible to “mine” cryptocurrencies, which is the process of creating new tokens through the labor of a community of human miners and nonhuman hardware and software working together to solve cryptographic puzzles (Maurer, 2013:13).

Similar to the algorithmic materiality built into the blockchain, “nodes” that become “exchanges” are operated by parts of software which follow exchange rates, validate, sell and buy tokens at the right moment. When one wants to start a “movement” (i.e. speculate with the currency) the act is often of non-human agency, the dynamic quality of an algorithmic assemblage. If we think about the algorithm behind “schemes” described in the previous chapter, the main reason they crashed is that they were not a “closed circuit” - someone at some point would stop reinvesting the interest they gained from the scheme. With cryptocurrencies, this process was replaced by “code” set up by a human to perform a set of operations in a loop, potentially forever. In the case of Bitcoin, the proofing mechanism and human “trust” were replaced by operations inside of the code, and the speculation performed by third-party algorithms ensured constant “movement”.

How is this achieved? A trading algorithm is a program that interacts with a trading

platform and executes trades under some given rules or an operation framework. They must also abide by the constraints imposed by the trading platforms (e.g. number of actions per second). They can be coded with many different programming languages, but all of them must interface with the trading platform application programming interface (API). In broader categories of their performance, they are algorithms for profit, for liquidity and for volume execution. The ones that are used for trade with koliony are called *market makers* (and many others, including electronic market makers, automated market makers, automated liquidity providers, or more commonly, high-frequency traders). These traders operate market-making bots, which are usually presented in the context of a continuous double auction on a limit order book (Detrio, 2015), employing whichever strategy is most beneficial on a moment-to-moment basis. This liquidity provider, by visualizing it as market-making bot that places limit orders on a combinatorial order book, and adjusts the prices of its limit orders in response to trading activity. A market maker must have funds with which it operates the stabilization of the liquidity. Those makers are made to *animate* the order book. Once the tokens are there they cannot go away, although at the time of this writing many of the plethora of altcoins are enlisted as *dead*, meaning there is no more exchange performed with them. At the same time, these bots are not designed to exist forever, they require maintenance and updates (e.g. with the changing API of exchanges).

Sell Orders				Total : 564.804186 KOLION	Buy Orders				Total : 0.09349968 BTC
Price	KOLION	BTC	Sum (BTC)		Price	KOLION	BTC	Sum (BTC)	
0.00013139	10.0837862	0.00132490	0.00132490		0.00012785	62.5752858	0.00800025	0.01427634	
0.00013140	11.9558930	0.00157100	0.00289591		0.00012646	48.9655295	0.00619218	0.02046852	
0.00013270	24.0240587	0.00318799	0.00608390		0.00012407	48.9655295	0.00607515	0.02654367	
0.00013531	46.6607802	0.00631367	0.01239757		0.00011521	1.98611148	0.00022881	0.02677249	
0.00013791	44.8983333	0.00619192	0.01858950		0.00011520	100.000000	0.01152000	0.03829249	
0.00015038	2.00000000	0.00030076	0.01889026		0.00009462	3.23658358	0.00030624	0.03859874	
0.00015039	2.00000000	0.00030078	0.01919104		0.00009461	42.2805985	0.00400016	0.04259890	

Img. 3. Kolion order book on exchange platform. Screenshot from Tidex exchange, June 2018.

Trade History - KOLION/BTC ^				
Date	Type	Price (BTC)	Amount (KOLION)	Total (BTC)
24.06.2018 00:47	BUY	0.00013034	2.00000000	0.00026068
24.06.2018 00:47	SELL	0.00013008	23.1849984	0.00301590
24.06.2018 00:39	BUY	0.00013034	2.00000000	0.00026068
24.06.2018 00:39	BUY	0.00012982	13.3847868	0.00173761
24.06.2018 00:31	BUY	0.00013034	2.00000000	0.00026068
24.06.2018 00:31	SELL	0.00012982	12.5770882	0.00163275
24.06.2018 00:23	BUY	0.00012982	2.00000000	0.00025964
24.06.2018 00:16	BUY	0.00013034	2.00000000	0.00026068
24.06.2018 00:16	SELL	0.00012988	17.1221729	0.00222382
24.06.2018 00:08	BUY	0.00012982	2.00000000	0.00025964
24.06.2018 00:00	BUY	0.00013004	2.00000000	0.00026008
23.06.2018 23:53	BUY	0.00013050	2.00000000	0.00026100
23.06.2018 23:53	SELL	0.00013050	29.1684782	0.00380648

Img. 4. Kolion Trades log — the frequency of buy-sell orders indicate a simple arbitrage: bot sells a specific amount and gradually buys it back. Screenshot from Tidex exchange, June 2018.

Speculation makes cryptocurrencies a global phenomenon and brings them to the attention of the media. According to the textbook definition of *human* traders, speculation is a one-sided aggressive act for maximizing profit, which “destroys” the market. The introduction of automated high-frequency traders for example, is associated with such an “insensitive” crash, like the one that happened in 2010 (Comm, 2017).

It is interesting that in the world of *human* financial trade, at least in its theory, there was always a clear separation between arbitrage and speculation, with the former being considered a lower-risk, sensible strategy which requires craft and knowledge of the

market. As Miyazaki (2007) showed in a study of Japanese traders, the practical difference is often ambiguous, and the distinction between speculation and arbitrage does not need to be so clear-cut. It is arbitragers' ethical commitment and economic modeling systems that create distinctions.

But “crashes” caused by “aggressive” non-human traders prompted finance officials to strongly regulate the usage of high-frequency traders on stock markets. At the same time, the loosely regulated environment of cryptocurrency exchanges provides a platform where these algorithms can be introduced and applied. In one review, a financial trade expert estimated that 80% of the volume of Bitcoin transactions is initiated by automated traders (Bloomberg.com, 2017).

Mikhail often repeated: “Kolion is like my child. He is three years old now. I am working for him to get stronger. He is supported by three ‘pillars’, which are: the portfolio - 400 bitcoins collected during the ICO (Initial Coin Offer), the farm’s production and speculation. And now his reputation, the way people will talk about him, is going to be the fourth factor”. More than that, Mikhail generally referred to kolion as a *living being* - something *born* at the farm, grown and taken care of, which materialized in different forms throughout its existence, either paper vouchers or digital currency. Moreover, despite of the purely speculative nature of the cryptocurrency, Mikhail’s interest was to ensure its constant stability and to show its backing in real economy:

“The money that was collected - around 400 bitcoins - I don't touch it, it is growing all the time. And it will not go lower compared to what it is now, which is worth around a million dollars. Plus I have a nursery which is valued at around one million, 400 000 kolions in my “fridge” (cold wallet), around 2 million in subsistence goods which can be sold in Moscow at any moment. Trees are growing and bitcoins are growing. Startups don't show any of this - they just have some idea or patent, they can't show any of this...” (Mikhail, Audio Recording, July 2017).

The “reality” of kolion’s backing was not as real as it was presented, which is the case with most contemporary currencies that have no “physical backing” other than obligation of the issuer (Ingham, 2004). The implied assumption was that the farm’s assets and its production would be able to cover an investor’s claim at physical objects covering their “investment”. At the same time, kolion’s rate on the cryptocurrency exchange was supported by the trade of other cryptocurrencies collected during the fundraising. That sum

enabled constant speculation with the token and facilitated its relatively *stable* existence in the space of crypto-exchange. During my time in the field, Mikhail was worried that once introduced to the exchange, kolion would “jump too high in price and then fall” and that would be hard to stabilize using the existing funds. That is why he needed to regulate the currency cap and the exchange price – this regulative trading is now performed mostly by non-human agents created by the platform’s programmers specifically for buying and selling koliony in a way that prevented its value from dropping or rising too much.



Img. 5. Mikhail and Cryptomat. Photographed by the author in 2017.

While the backing of cryptokolions with the farm’s production was insisted upon by Mikhail, the connection to the physical world relied on a number of bearers (Introna 2015) in order to access, save, own and trade cryptocurrencies. This includes computers, smartphones and so-called “cold wallets”, which are devices created specifically for storing cryptocurrencies “off-chain”. One of them is also used to exchange cash for cryptocurrency:

”A group of men, visitors gathered around the newly arrived cryptomat, the

machine which exchanges rubles to kolions. The Internet does not work well in that room, but the device is still able to connect to the online platform, transfer the amount to bitcoin and then exchange them for kolion. The cryptomat swallows the paper banknote and spits out another paper with a loud printing sound - a QR code that can be scanned by the buyer with a mobile phone. That is how kolions are now sent to ‘wallets’”. (Fieldnotes, 20.7.2017)

The arrival of the cryptomat was expected even before I had settled at the farm. The large blue “locker” (as nicknamed by Glavnyi) got its own room in the hospital. “Have you heard what Alexii said — in Yegoryevsk people are wondering about koliony. They didn’t grow out of Bitcoins yet, and they keep asking about what is around the corner. When the cryptomat arrives, they will be able to come and get kolions”, Mikhail explained upon the machine’s arrival. Crypto ATMs act as an easy-to-use alternative to online exchanges and allow people to buy (and sometimes sell) various cryptocurrencies for cash. They are devices that look similar to a regular bank ATM, but which are operated by online entities that act as crypto-exchanges or as intermediaries to crypto-exchanges. As part of the process, they buy larger amounts of the currencies they offer and sell them to users for a considerable fee (between 5-10% of the transaction), which factors in the cost of hardware, the volatility of the traded currency, blockchain fees and regulatory charges. When a person wants to “withdraw”, the process is similar to what I have described above: they insert cash into a slot in the machine and choose how to transfer their newly bought cryptocurrency to their wallet. This “wallet” can either be a physically printed QR code with a cryptographic public/private key pair that contains all the information needed to spend the funds, or it can be a wallet that is already owned by a user and which can be presented to the ATM via a QR code generated by a wallet mobile app. Many of the entities operating these devices are starting to be regulated similarly to online banks, and are required to identify their users and to implement AML (Anti Money-Laundering) safeguards as part of the process. After the transaction in Kolionovo’s cryptomat, the cash remains with Mikhail, and people who purchased koliony can do whatever they want with their purchase; there is not much they can do, however, other than sell it as speculation on the exchange, return them to Mikhail when buying farm products, or just keep them as a souvenir, as I did.

4.3 The other side of the coin

It would be simplistic to claim that koliony just existed as entity animated by human-algorithmic value trade on the exchange platforms. Judging by the amount of visits that were driven by the issuance of koliony both before and after I was present at the farm (i.e. before the cryptocurrency started *being used*), one could say that cryptocurrencies did indeed *organize* a “new sociality”, as envisioned by Bitcoin creators, albeit one that was hardly connected to the *usage* of the currency. The prospect of its speculative power and its usage as an alternative fundraising for business generated the hype. For most visitors, the attraction was also based on one of the ideological pillars of Bitcoin, one that emphasizes individual liberty and sees “sound” money as a key component of that liberty and governments as attacking it (Maurer, 2013). When asked about the reasons why he had come all the way to Kolionovo, one of the visitors said that he was considering new ways of gaining funds for his business. He also added with fascination: “When I heard Mikhail saying: we didn't have any money so we went and printed some - this is fascinating! Such a fine fellow! (molodets muzhik)”. But generally, Mikhail was not excited by these continuous visits. Once, showing me some photos from the previous activities at the farm, which were concentrated around eco-volunteering, festivals and even demonstrations, he commented with bitterness on how unfortunate it was that out of all the activities they had done in previous years, it was the currency hype that “put Kolionovo on the map”. “Back then people were coming here to *do* something good. Now they just come to ask how I managed to make money.” (Fieldnotes, 24.7.2017).

But in some cases the “crypto-community”(kripto-tusovka) did have an effect on the subsistence trading at the farm. For example, a geese farm 60 km away from Kolionovo was offered to distribute geese as part of Kolionovo “farmer’s baskets”, as the owner was also involved in the “cryptocurrency rush” according to Mikhail. This gave them the opportunity to “arrange matters” in such a way that their products would be bought in rubles and sold to those who purchased koliony. A similar example was one of the Moscow farmer shops that partnered with the farm and started accepting koliony as payment, driven by the owner who was a cryptocurrency enthusiast.

Both Bitcoin and other altcoins, including koliony, were perceived as more than just code or a payment alternative by people at the farm. From a pragmatic perspective and as explained “officially” in interviews for the media, it was viewed as a complementary way

to fund activities without bank loans or donations from the government. But it also represented a carrier of value beyond its material agency, which was given by its attribution to *this* specific location, like Kolionovo, and *this* specific person, Mikhail, standing behind it. This approach is ideologically different from the one proposed by Bitcoin, which is highly focused on the anonymity of transactors and the initial creator, Nakamoto. As Maurer (2015:14) pointed out, Bitcoin serves as “inversion of personal credibility”, where instead of establishing reputation by extending oneself via relations and circulating credit, participants choose to cut off all flows of information about themselves. Although this is also valid in case of kolions (most of the purchasers/investors were anonymous), the emphasis was put on the identification of the token with a place, person and special narrative – which was promoted by the media.

Detailed information on the usage of cryptocurrencies outside of speculation is missing but, some evidence, including my own observations, shows that they are also being used as a medium of exchange. Nevertheless, their limited fungibility due to the unstable value generated by constant speculation proves to be a great hurdle to their widespread adoption as currency. Additionally, the throughput of the network (i.e. the number of transactions that can be processed in a second) of Bitcoin, for example, is significantly lower than that of established payment methods, mostly due to the way Bitcoin transactions are validated and added to the blockchain (Antonopoulos, 2015). In some cases it is also problematic to exchange Bitcoin and its peer cryptocurrencies for general-purpose currencies - for example, countries with low currency liquidity face difficulties in converting cryptocurrencies back to national currencies (Hileman, Rauchs, 2017). In my opinion, this has also led to phenomena such as ICOs or fundraising with cryptocurrencies, as even the speculative ability of popular cryptocurrencies is limited. Because bitcoins themselves are limited in amount, the creation and sale of new digital tokens ensures the continuation of speculation and unlimited movement.

It is also operationally easier to exchange digital assets for other digital assets rather than physical objects, though there are numerous businesses which offer goods and services that can be paid for in cryptocurrencies. In these latter cases, the novelty of cryptocurrencies as a phenomenon together with their volatility means that most transactions have to be preceded by some additional negotiations to establish the current exchange value. This was indeed the case with Christmas trees from the farm being sold for Bitcoins, as mentioned in Chapter 2, using the “arranged price” (*dogovornaia tsena*). This

was also practiced on other occasions when selling from the farm: the “arranged price” was used for buyers outside of the “circle” or “svoi”, while the latter had a *guaranteed* price thanks to their subscription.

For example, Mikhail was asked to provide some advice about launching an ICO to one of his acquaintances’ friends. While angrily reading the email, he replied that he will charge kolions for his services. When asked how much the visitors should prepare, Mikhail answered “as much as they will think is appropriate for the information that they will get”. Subsequently, he told me a story about how he sold raspberry bushes. The usual price for established customers was 500 rubles. When new ones arrived, he told them they should pay as much as they think is appropriate. A pair of buyers told him that they had heard the market price was 500 but asked if he was willing to sell them the bush for 350 if they would dig it out and transport it by themselves. Mikhail agreed, but upon their return the visitors decided to pay him 450 as they felt it was more fair. So the price ended up being close to the usual rate and he did not have to bother the workers with extra assignments. (Fieldnotes, 24.7.2017).

The arrangements worked the other way around as well, when something was paid for with koliony. Shortly before I had arrived to the farm, Mikhail announced that he had paid for building materials from a neighboring supplier with digital koliony. He had also paid in koliony at a farmer’s restaurant in Moscow and “arranged” that this would be possible for any holders of koliony. Operations like these are more reminiscent of barter than monetary exchange, though many definitions of the term put them in direct opposition: objects of exchange have direct consumption values, unlike monetary exchange “where the value of one exchange object (money) has no direct use but is merely a claim on other definite values” (Humphrey, Hugh Jones, 1992: 8). This argument continues with the point that the essential part of barter is for transactors to decide that one object is worth another one. Considering the prevailing quality of the cryptocurrency as a commodity, but also as a credit obligation, this is no different than the process of “arranging” payment with digital assets like koliony, which can conceptually be replaced with potatoes, for example, without much strain.

Similar to barter, transactions with koliony appeared “in the circle”, which means koliony were usually offered to local suppliers with whom Mikhail had previous encounters. It was “arranged” similarly to other transactions at the farm, and although I was

not present when the transaction happened, I was personally involved in the process. While helping create the farm's website, some expenses, like web hosting, were paid with my credit card. Mikhail said that "we would make it even", and asked which form I'd prefer - cash or koliony, or maybe moonshine. For me, the answer was obvious: the amount I had paid had not exceeded my regular daily expenditure, also I was curious to *try* kolions given the context. I ended up receiving more than the exchange rate I had paid in fiat currency, and this "money" remains engraved in my "wallet" as a curious digital memory.

This chapter concentrated on the emergence of the Kolionovo farm's cryptocurrency, which is an algorithmic assemblage of human and non-human action whose dynamic quality is used in speculation. It functions similarly to the "schemes" described in the previous chapter, but enabled the creation of a "closed circuit" where the process was replaced by "code" set up by a human to perform a series of operations in a loop, potentially forever, by automated bots on an exchange platforms. Furthermore, I looked at the implications of koliony beyond online speculation: as a medium of the exchange, which bears similarities with barter, and also what type of impact this has on the "social" life of the farm.

5. Conclusion

This concluding part will bring together the seemingly unrelated paths and findings from previous thematic chapters. Throughout my fieldwork, I discovered that exchange in Kolionovo, especially the non-monetary one, was more likely to occur between people who considered themselves to be part of the same circle, or “svoi”. That consisted of several intersecting groups of actors, which were bound through mutual sympathy, interests, or past relationships. Those connections often went beyond the given locality of the hamlet. Goods, favors and labor were in constant circulation inside and between these groups. Regardless of the form taken by the exchange (monetary or non-monetary), it appeared as a part of a broader circulation. Graeber (2001) pointed out Fajan’s advice against falling into the same trap of the Maussian tradition of gift and commodity dichotomy and distinguish between exchange and circulation. Exchange appears when property of some sort passes between one actor to another. Circulation happens when values are transferred, including names, gossip, etc. Hence, exchange is only part of circulation, but in capitalist markets they are pretty much the same thing.

In the Kolionovo farm, exchange and circulation often coincided when situated in the established circles of “svoi”, but exchange was problematic when the values of transactors did not coincide. But even in these situations, the value continued to circulate through modes of performance (as refusal of exchange by a transactor is a performative act). This performative aspect was not only encountered in the actions themselves (as is the case with favors), but was also realized through giving away property of some sort. In Kolionovo, that was expressed through the attribution of produced goods to a person or place with which the creation of these goods was associated. As it was documented in early post-soviet ethnographies (Caldwell, 2004, 2011; Ledneva, 1998), anthropologists defined these actions and objects as the “in-between” space between gift and commodity exchange. But taken from a broader perspective, this had nothing to do with gifts or commodities whatsoever, as this was the binary logic of debit-credit relationship and the presupposition of reciprocity Western researchers attempted to use while analyzing “post-soviet society” (including the notion of “transition” itself which supposed that those “societies” were transforming into Western neoliberal capitalism). That is why I further speculated that this

process was a repetition of the redistributive and allocative mechanism of the soviet economy used on smaller levels, which surfaced with full intensity when the material agency of money entered the economy. Any entity can multiply, but the multiplication abilities of objects were integrated into the “self-expansive” practices of actors, creating cascades of various relations and assemblages of humans and nonhumans. As a result, if transactions were analyzed as isolated cases of exchange, they did not fall into a category of gift or commodity exchange. What seemed to be “reciprocity” was a random intersection of self-expansive practices of different actors in the frame of space and time. These assemblages were conceptualized post-factum into imagined “schemes”, often related to finance - like pyramids and rotating credit associations. Any other substance, including agricultural production, could be distributed in a similar way.

This was the context in which post-soviet alternative currencies, like koliony, crystallized. Their agency combined the old schemes of self-expansive performances and the agency of code and bots, which ensure their instant movement, and redistribute them to other human or nonhuman entities on the exchange platforms. In the end, the mechanics of combined speculation and stabilization were used to create a closed circuit model, hence the constant circulation.

This argument is similar to what was suggested earlier (Fajans, 1993; Turner 1979) with regards to “traditional societies”: that actions and objects often have a tendency to become models, representations in miniature of the broader forms of creative action whose value they ultimately represent. In the case of Kolionovo where the “traditional household economy” converges with something as abstract as the trade of digital assets, this was happening on several levels as a re-emerging pattern.

But is there any value involved in the action of koliony being automatically exchanged at a frequency that greatly exceeds that of human-initiated trade? Unlike general purpose money or even Bitcoin, they manage to preserve identity when they are given away and are able to lead back to the hamlet, like one of the dogs with the same name, which is similar to Weiner's keeping-while-giving of precious objects (Weiner, 1980) that I mentioned in Chapter 2. What the “missing hands” of a disappearing hamlet cannot perform in order to ensure the circulation of the currency and, through it, the perpetuation of the villageion of the currency and, of human-initiated labor of non-human agents on virtual exchanges. Curiously enough, upon my departure from the farm, I was asked to “keep moving” the koliony that I was gifted during my stay, more specifically to sell and buy them on the exchange. Automated algorithms are doing it anyway, but it was one of

the ways to keep me personally connected and contributing to the persistence of Kolionovo. Which brings me to a highly poetic note - humans invent different ways to overcome the destructiveness of loss and conquer the impermanence of social life. In some cases, it is speculation performed by automated high-frequency traders.

Speculation itself had a negative connotation both during socialism and post-socialism (Humphrey, 2001; Verdery, 1996), as well as in contemporary critiques of neoliberal capitalism (e.g. publications like Moneylab and aforementioned in Chapter 4 ethics of arbitrage vs speculation). Speculative practices, as this text explores them, are not necessarily evil or exclusively aimed at profit-making. The dynamic quality of the algorithmic assemblage that cryptocurrencies are becoming can provide the necessary circulation of values where no other means are available.

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