THE PETROCHEMICAL FORTRESS. SECOND TIER URBANIZATION IN SOCIALIST EASTERN EUROPE

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Abstract

Since the 1990s Eastern Europe went through major systemic reforms that led to considerable industrial restructuring. These had a major impact on second tier industrial cities developed during the 1945-1990 socialist period, which started to decline demographically and economically. Various perspective have been developed on these processes of decline. Some authors argued that is not a decline, but a sustainable shrinkage or a nested urbanism. The consensus in this literature is that the decline, or shrinkage, or nestedness is the result of a combination of global market forces and the inadequate development of these cities during socialism. This thesis engages with these cities' socialist development in order to understand these processes. The case of the city of Onesti, Romania, will be taken into consideration in order to outline the development of a second tier city in Eastern Europe and go beyond the shortcomings of current literature. First, it tries to overcome the lack of attention given to secondary cities in the urban scholarship, who's focus has been mostly on what Sassen ([1994] 2012) calls global cities. Second it criticizes the distinction made between capitalism and socialism in the literature on socialist urban development by arguing that socialism is not a different mode of production and thus cannot be compared with capitalism. Instead socialism is a different form of managing the production of capital, a different governmentality (Foucault 2003) and thus can be at most compared with liberalism, or other governmentalities. The aim of the thesis is not to compare them but to pinpoint how socialist second tier cities were linked with non-socialist cities in global socio-technical systems. It is shown that Onesti was already part of the global economy during socialism and played a considerable role in the regime's accumulation of capital. Using Foucault's notion of governmentality to describe Onesti as part of a set of institutions and practices forming the state and making its population, the thesis shows how during socialism the latter was transformed into a labour force employed in the global production of capital. The thesis also point out that transformations in the global economy, but also the population's subjectification (Ranciére 1999) of this socialist governmentality led to its redefinition into a neoliberal one. The decline of Onesti, and similar secondary cities in Eastern Europe, can be understood by looking at the role played by these cities in the neoliberal state formation and population making.

Introduction

I was looking from afar at the performers on the stage set up next to the new city hall of Oneşti. My phone was showing that the temperature was -12 °C. It was so cold I could not move my fingers, which froze on the photo camera I was holding. There were around 200 other people besides me attending the event, dressed up in heavy coats, wearing leather boots, gloves and furry or woollen hats. Everyone's nose tip was red. On the terrace of the city hall's first floor some of the local authorities were watching the performances, from time to time going inside the building to warm up.

It was the 31st of December 2014, and for a while now, every year on this date the city administration supports a folk practice by setting up a stage for *urători*, groups of men dressed up as monsters, bears or a goat enchanted by drums, bells, firecrackers and whistles. The group leader, or sometimes several of the group members, recite a poem composed of New Year wishes, with a chorus consisting mostly of screams. As I moved around trying to keep my body warm and get a glimpse of the people around me and the groups of urători, I hear the voice of a man starting to recite one of these wish-poems. He was reciting an embittered story about industrial decline in Onești and the nearby cities. Later I found out that he was a pensioner, a former worker at the chemicals factory living in a nearby village, who wrote the poem himself. It tells the story of a trip that ends in Onești and goes like this:

When I arrived in Onești/ I started to cry/The IUC, the Cauciuc/ Both are bankrupt/ Rafo¹ I say to you/ It was sold to foreigners/ The scrap metal was collected/ And the pipelines were cut.

¹IUC (the chemical equipment enterprise), Cauciuc (the synthetic rubber factory) and Rafo (the oil refinery) are all local enterprises located in the industrial area that got built during socialism.

Since the beginning of the 1990s Eastern Europe went through a process of industrial restructuring, in the context of major systemic reforms (Burawoy & Verdery 1999, Hann 2002), which led to the decline of most of the second and third tier industrial cities developed during the socialist period, Onești included. The latter is a secondary city in the Romanian section of the Outer Eastern Carpathians, part of the geo-cultural region called *Valea Trotuşului* (Trotuş Valley) (Văcăraşu 1980, Şandru et al 1989), located 266km North of Bucharest. In 1952 the Council of Ministers decided to build here an industrial area specialized in oil refining and petrochemicals production. The reason for this step was the oil wells and salt deposit in the region. As a result, Onești's population grew from 3.000 persons in the late 1940s to 60.000 at the beginning of the 1990s.

Nowadays, the population dropped to around 35.000. Most of them relocated in the villages from where they came, migrated in bigger cities or in Western countries because of the lack of work opportunities. From the enterprises built in the industrial area, only one of them is still producing. Idiosyncratic narratives combing ethnic forms with disenfranchised sentiments, like the one articulated by the chemicals factory worker are abundant in deindustrializing cities and regions (Kalb & Halmai 2011). This process of deindustrialization started in the 1970s in Western Europe and North America. It was framed then by many in terms of economic decline and precarization of workers' lives (Nash 1989, Pappas 1989). When deindustrialization began in Eastern Europe after the fall of socialism, the first to address the issue were scholars dealing with East Germany cities, who framed this process as sustainable shrinking rather than decline and influenced scholars in the whole region (Bontje 2005, Popescu 2014). It was for them the result of a combination of global market forces and the inadequacy of the previous socialist development of these urban spaces to the new economic requirements. Others engaged with the

idea of nested urbanism, which understands this decline as a result of an entanglement of local, regional and global factors affecting simultaneously the cultural, political and economic dimensions (Durrschimdt 2008). But I think that in order to understand these processes, one must thoroughly engage with the history of the development of these cities.

In this thesis I look at the practices of developing the Romanian secondary city of Oneşti between 1952 and 1989. The aim is to find out how these practices changed over time, dealing with two specific shortcomings of the existing literature in urban anthropology and sociology. First, most of these urban scholars, who look at primary or mega cities in order to understand how urbanization is shaped by global forces since the 1970s, have neglected the role played by second tier cities in the global economy, or have treated their decline as a collateral effect of the concentration of financial capital in Western European and North American big cities (Friedmann & Wolff 1982, Sassen [1994] 2012). My first aim is to grasp to what extent and in what way are these practices of second tier urbanization embedded in the global networks of capital flows (Chen & Kanna 2012, De Boeck et aş 2009, Markusen et al 1999).

Second, there is a tendency among scholars of Eastern European urbanization to make a sharp distinction between the socialist and capitalist development of cities (Andruszet et al 1996, Castells 1977, Chelcea 2012, French & Hamilton 1979, Hirt 2013, Petrovici 2006). In this literature it is often implied that the socialist city development is bounded within the Soviet Union sphere of influence by the shared political, economic and cultural principles. Hence, my second aim is to trace the practices of urban development during socialism in connection to global capitalist dynamics by not limiting the discussion to Cold War political discourses.

Second tier urbanization was supported during socialism as part of the politics of economic development promoted by the regimes controlled by the communist parties (Ronnås 1984, Sampson 1984). It was coupled with discourses of rational and efficient industrial planning around natural and human resources and the improvement of living standards. Throughout Eastern Europe there was an emergence of mining towns, steel towns, chemical towns etc. Oneşti was dubbed then by official narratives *the petrochemical fortress, chemistry's fortress*, or *the fortress of work*. In the second part of the 1960s, the city was presented as one of the achievements from the regime's *popular power years* and after the death of Gheorghe Gheorghiu-Dej in 1965, leader of the party throughout the post 1945 period, Oneşti took his name until after the official demise of the communist party rule. Like Dunaujvaros in Hungary (Pittaway 2005), Dimitrovgrad in Bulgaria (Brunnbauer 2005), Nowa Huta in Poland (Lebow 2013), Eisenhuttenstadt and Schwedt in East Germany (Bernhardt 2005), and many other new socialist cities built in Eastern Europe, Oneşti was mobilized in discourses justifying the modernization and the social justice provided by socialism.

I approach the secondary city of Oneşti as an effect of the systematization (*sistematizarea*), a governmental procedure aimed at regulating the distribution of the population in cities according to the existence of natural resources and industrial activity. Using the work of Foucault (2003, 2007) I frame this as a procedure of exercising biopower, the power of letting live or die, of making and unmaking a population, which is part of a modern state's governmentality. Even though Foucault's work is based on mostly cases from Western Europe and North America, I follow the work of Collier (2011), who analysed the Soviet Union equivalent of systematization using a similar theoretical approach. He argued that city-building, or *gradostroitel'stvo* was a practice that constituted the socialist governmentality. Its aim was to transform the Soviet Union's population into a labor force and employ it in the processes of industrial production.



*Figure 1 Flyer from the 1980s with the City's coat of arms, a photo of one of the main street axis and distinctions received for being the best managed city.*²

Whereas Collier (2011) focuses on the internal, policing aspects of this socialist governmentality, I want to explore also the external relations (Foucault 2007) that had an impact on its development in Romania. To overcome Foucault's limitations in this regard I will employ the Marxist notion of a mode of production (Wolf 1982). The premise on which I build my argument is that the socialist governmentality developed as a specific way of organising the production of capital in the capitalist mode of production. This governmentality did not constitute "a capitalism pure and simple", as recently Tamás (2009) has claimed, but a specific form of managing the production and accumulation of capital, a "superior form" of the "rationality of profit" (Negri 1991), based on the complete fusion between economic and political powers and taking the form of the state. Yet, the capitalist mode of production is more than the production and capital accumulation within the frame of the state. It is the conjunction

² Available in the Onești Collection of the Onești Municipal Library

of production in states with the circulation of capital between states (Wolf 1982). The socialist governmentality was not capitalist in the Marxist orthodox sense, but it was part of capitalism (Chase-Dunn 1982), which is a global, inter-state mode of organising society linked with production within the state boundaries.

My research of Oneşti's development was done in three fieldwork periods: three months in the summer of 2014, two weeks in the winter of 2014-2015, and one month in April 2015. In this period I researched archival material and oral histories. In the thesis I look at systematization plans which I accessed in the Bacău county branch of the National Archives (SJAN Bacău) and reports regarding the oil and petrochemical industry made by industry experts and party members of the local organisations, addressed to the Central Committee of the party, which I accessed in the central branch of the National Archives in Bucharest (ANIR). Also, my information regarding the city systematization stems from the collection of manuscripts and books on Oneşti kept by the city's library and reports of the Radio Free Europe on Romania accessed at the Open Society Archives in Budapest.

The oral histories were collected in interviews I made in these field trips. Being born and raised in the city, my main informants were my family members. For example, my grandparents arrived in the city in the late 1950s when my grandfather, a recent graduate of peasant origins, received a job as a construction engineer on the construction site of Oneşti. His technical expertise helped me confront the data I found in the archives, whereas his personal experience in the new city helped me understand how social mobility was unfolding. I have also interviewed engineers, administrative staff and workers from the various enterprises located in the industrial area in order to understand the different experiences of the city informed by the period's social stratification. This also enabled me to understand the power relations at work in the management

of labour.

The thesis is structured in three chapters. I analyse in the first chapter of the thesis the socialist projects of city systematization (sistematizarea orașului) of Onești în order to see how expert urban planners together with local and national authorities articulated the subsumption of the city to the process flow of the industry it was attached to. Three ways in which the city and the social practices in it were subsumed to production will be underlined: through budgeting, demographics and utility networks. In the second chapter I describe the multiscalarity of the process of systematization and thus expand on the subsumption of the city to the national and global industrial production of oil. Through these the city was embedded in oil transport pipeline networks that encroached it in a hierarchical socio-technical system, which contributed to the creation of a global commodity chain. Here is where the socialist governmentality and the capitalist mode of production interrelate. In the last chapter I engage with how the city inhabitants experienced the city by exploring the particular practices developed by this specific entanglement of industrial production networks and the subsumption of the city to it. I describe the ways in which the socialist governmentality was subjectified (Rancière 1999) by the city population through the hacking of the infrastructures of oil production, how this was made possible by the technical assemblage allowing the oil flows and how it contributed to the turn to the post-socialist neoliberal governmentality.

Onești was among the first socialist cities built after WWII in Romania. The construction of a petrochemical industrial site and a city "attached to it" was officially decided in 1952. On the 31st of December of the same year, Institutul de Proiectare a Construcțiilor (Constructions Design Institute – from now on IPC), commissioned by Ministerul Industriei Petrolului si Chimiei (The Ministry of Oil and Chemicals Industry – from now on MIPCh), outlined the first stage of the construction site of the city, which comprised the first *cvartal*³. The cvartal was a form of organizing housing districts in early Soviet Union (Parkins 1953), composed of blocks arranged in such a manner that the entire composition would create several enclosed green areas, which the Romanian architects would employ until the mid-1950s (Mărginean 2015).

New socialist cities were conceived in the minutest detail in order to create a space entirely organized according to rational principles and socialist realism aesthetics. The architects' projects would be based on the idea of creating a system of interrelated functional spaces, scaled up from apartment rooms to neighbourhoods to the entire city, that would not only ease and make more equalitarian the unfolding of social practices, but would also be aesthetically pleasant and thus would overall improve the human condition.

These cities emerged in the context of a predominantly agrarian Eastern Europe, which was also ravaged by the WWII. In 1948 in Romania only 23, 4% of the total population was living in cities and out of 3.713.139 urban dwellers 1.041.807 were living only in Bucharest

³ SJAN Bacău, fond ISO, dosar 1/1952; in these documents it was referred to as *cuartal*. I chose to write it with a *v*, *cvartal* as in Lăzărescu (1974)

(Golopenția & Georgescu 1948). On average the urban household had 4, 17 members in 1930 and 3, 47 in 1948. In the rural areas like that of Onești, on average the rural household was composed of 4, 35 members in 1930 and 3, 88 in 1948 (Golopenția & Georgescu 1948). According to a 1930 census, out of 3 million rural dwellings 2, 2 had 1 or 2 rooms (Ronnås 1984). Often only one of the 2 rooms were being used by all the members for most of their activities (Scurtu 2001).



Figure 2 Areal view of the city in the 1960s⁴

The rise of the Romania Workers' Party, from the mid-1960s the Romanian Communist Party, to power after 1945 was accompanied by a discourse that promised the improvement of living standards. Despite the critique of capitalist societies and the formulation of alternatives to it that the Marxist-Leninist parties were trying to provide, by the beginning of the 1930s there were many similarities between the cities designed by Soviet Union architects and those in

⁴ Photo taken from Gusti (1965)

Western Europe and North America. With the advent of modern urbanism in Europe, cities started being seen as a sign of material progress and urban dwellings as offering the best conditions for living. Urban scholarship has in fact dealt extensively, and almost exclusively, with the issue of whether there is a substantive difference between cities in the Soviet Union and Eastern Europe and those on the other side of the "iron curtain" (Andrusz, Harloe & Szelényi 1996, Castells 1977, Chelcea 2012, French & Hamilton 1979, Hirt 2013, Petrovici 2006).

I am less interested in these differences and similarities. My focus is on how the socialist cities were linked to non-socialist cities. That is, on how these were co-constitutive of large and global socio-technical systems (Hughes [1987] 2012, Easterling 2014). I will develop this in the next section, focusing on the oil pipeline infrastructure. But now I will focus on how Oneşti was built in order to underline some of the characteristics of the city that made it linkable to other socialist and non-socialist cities.

Its first cvartal was placed in the South-East of the city, on an 8.8 ha surface. It was supposed to house 1.600 employees out of the 2.000 of the industrial platform; 640 of them would live in two buildings designed as youth hostels, *cămine de nefamiliști* (literally, houses for bachelors), 336 in blocks of apartments shared by two families and 228 in apartments for one single family. In Onesti's first cvartal the youth hostels had 4 beds rooms distributed along corridors that offered communal facilities for personal hygiene and social activities. In the apartment blocks, the apartments were built with 2 rooms, in 19% of the cases 3, a kitchen, a bathroom, a storage room and a small hallway. These blocks were conceived with a basement that had private and common storage and laundry drying areas and had a ground floor + 2 levels height, with 3 apartments per level. The ground floor of two of the apartment blocks was designed for shopping stores and a separate building on the southern border of the district was

designed to house a nursery and a kindergarten. A "popular restaurant" for the meals people residing in the youth hostel would take after the working hours was also taken in consideration. In the center of the district a park would offer the space for leisure activities.



Figure 3 Map of the industrial area, city area and the location of the 1st cvartal in the $city^5$

Even though its design created the feeling of the residents being isolated from the rest of the city, it was supposed to be integrated in the general city plan. In the IPC document regarding the construction of this first district it was noted that "[t]he buildings of the first stage will be grouped as much as possible, maintaining an open ended aspect because they will be closely linked to the next stages of the general city plan"⁶. The city systematization incorporated the

⁵ Made with Google Maps

⁶ SJAN Bacău, fond ISO, dosar 1/1952, p. 6

districts following Soviet city planning principles by situating them along major road axis (*bulevarde*) radiating from the the city center (*centrul civic*) towards the industrial site (*platforma industrială*) (Åman 1992). The axis were constructed as wide as possible because of their role of facilitating the mobility from residence to work place and of city provisioning services, military interventions in case of need, but also for providing space for popular parades, as the 1st of May ones, which often culminated in the civic center's big square, from where leaders of the party would address the crowds.

Likewise, the organization of the industrial site, to which the city was attached, was partitioned in various functional spaces:

The industrial areas comprise the land of the enterprises that constitute the basis of this area and their auxiliary units like: storage for waste (if possible in common), power plants, heaters, railways and roads, possible future extensions, social center and administrative area etc. (Adler et al 1961, 138).

The initial project of Oneşti's industrial area extended in to the administrative borders of the nearby village of Borzeşti and comprised four enterprises: a thermal power station, an oil refinery, a chemical plant and a synthetic rubber factory. These were interconnected and exchanged various processed and unprocessed commodities. For example the refinery would give to the synthetic rubber plant benzene, ethyl benzene, butane, hydrogen, propane, propene, pentane and toluene; to the chemical plant it would give benzene, paraffin oil, aromatics and toluene; to the power station oil processing residues. It would receive from the chemical plant sodium hydroxide and from the power station energy and steam (Băncilă 1977).

Nevertheless, unlike in the city systematization, where the organization of social life seemed to be a determining factor in the designing process, in the systematization of industrial areas, the determining factor of the size and design of the enterprises, and consequently of the industrial areas, was the *process flow*, rather than the organization and management of work. It was the technological aspect, the mechanisation of processing machinery that determined the spaces of the social practices of the workers and not the other way around. This was overtly stated in a book detailing the industrial systematization practice:

The flow of the raw, semi-processed and finished products must be as short and as rational as possible. The enterprise's capacity, its profile and the general plan determine the size of its spatial allotment. [...] The flow of materials determines (...) also the general size of the buildings, the size of the workshops and of the space occupied by the enterprise (Adler et. al. 1961, 173).

This relation between technology and work was already noticed by Marx (1973, 693),

who argued that with the introduction of automatic machinery

The production process has ceased to be a labour process in the sense of a process dominated by labour as its governing unity. Labour appears, rather, merely as a conscious organ, scattered among the individual living workers at numerous points of the mechanical system; subsumed under the total process of the machinery itself, as itself only a link of the system, whose unity exists not in the living workers, but rather in the living (active) machinery, which confronts his individual, insignificant doings as a mighty organism.

One way of reading Marx's statement is by saying that he was arguing that the value creating labour practices have ceased to be a strictly human activity and that with technological innovation, sooner or later, human labour will be completely replaced by machines.

Marx intended to say something different. Machinery as the fixed form taken by capital, i.e. objectified labour, is the most adequate way of subsuming human labour to the imperative of production. He (Marx 1973, 693) says that "the worker's activity, reduced to a mere abstraction of activity, is determined and regulated on all sides by the movement of the machinery, and not the opposite". Marx pointed out that the machinery's value creating practices, its mechanical movements and spatial fix redefine the abstract concept of labour, or social labour, which is the

measurement instrument of all labour. Thus human labour's value becomes measured by this abstract labour which is defined by the machines' practices.

Yet, this is not just an abstract subsumption of human labour to machinery, but it is found also at the material level in the interaction between machines and individual bodies. As Foucault (1977) argued, this interaction articulates a disciplinary mechanism of power. He (1977, 153) mentions that "[o]ver the whole surface of contact between the body and the object it handles, power is introduced, fastening them one another. It constitutes a body-weapon, body-tool, bodymachine complex" that establishes a durable coercive link between the machinery's production process movements and the worker.

In a collection of research essays on Oneşti (Lazarovici & Pomîrleanu 1970), a study analyses this relation by introducing the concept of *human-machine system*. The authors employ it in analysing labour productivity in the enterprises from the industrial area and suggest approaches to the improvement of working conditions. It points out the possible setbacks derived from the technological equipment, from the workers' level of qualification and from the specific health hazards caused by working in petrochemistry. But, even though it overtly states the purpose of the research is that of improving the workers' conditions, the suggestions are all addressing changes that should intervene in the latter's practices. For example, it argued that the worker should work in shorter shifts to reduce tiredness that might make him unable to operate the machine and thus break it. His health becomes from this point of view dependent on his relation with the machine.

The question that immediately arises is whether Marx's analysis of the capitalist production can be deployed in an analysis of production in socialism. My answer is yes. The socialist regimes' interest in investing in machinery and machinery producing industries was not limited to the goal of controlling all resources in order to legitimize themselves through a redistributive power (Verdery 1996). These regimes were interested in producing capital, that is, in objectifying labour by dispossessing workers of their surplus time, as much as private corporations were. Socialism was not a different mode of production, but a different way of managing the production of capital. This was best expressed by Antonio Negri (1991, 166), who stated that:

Socialism is the highest form, the superior form of the economic rationality of capital, of the rationality of profit. It still thrives on the law of value, but carried to a degree of centralization and of general synthesis which connects the forms of socialist planned economic management to the functioning of the political and juridical machinery of the State.

In this context, where political and economic practices merge and concentrate in the form of the state, industrial machinery was the best form for capital to take in order to produce more capital. For the socialist regimes, industry was not just accumulation of capital, but of that particular form of capital that produces more capital. Its centralization and planning, indeed, offered to the bureaucratic apparatus a distributive power at national level, but this was entangled with the need of making profit in the global capitalist economy. I will come back to this in the next section.

The systematization of cities, which included the minute design of neighbourhoods, blocks and apartments was not only a matter of emulating Soviet Union imposed ideas on urbanization. It was a situated practice aimed at extending into the city dwelling conditions the subsumption to machinery of the workers' conditions on the shop floor, to have the movements and spaces of city dwelling determined by the movements and spaces of machinery in the production process flow. In one review of urbanism practices in Romania, coordinated by a leading architect of that period, this was stated in the following way: "for most of the cities, industry is an important part of their formation and development, determining the size and general structure, as well as the working and life conditions of the population" (Lăzărescu 1972, 37).



Figure 4 View of enterprises in the industrial area in the 1960s⁷

This extension was made by establishing links between industry and city, which was done in several ways. First, housing and socio-cultural facilities were to be financed by the industrial enterprises, or jointly with the local administration. These constructions would become part of the firms' and municipality budget and adjusted in relation to the production output and the five-year plans. The unfolding of the constructions of the first cvartal in Oneşti, which was commissioned by the MIPCh, was entirely depend on the performance of the platform's refinery, its machinery-human aggregate, which was integrated in this ministry's structure, and the achievements of the general five-year plans. The work on the cvartal began in 1952, together with work on the refinery and the thermal power station. The latter two will start producing in 1956, but the cvartal will be finished towards the end of the 1950s.

Second, demographically the city systematization would be limited by the capacity of the industrial platform to absorb the labour force. For instance, the first systematization was done considering a population increase at a maximum of 20.000. The projected investments in the

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⁷ Photo taken from Gusti (1965)

industrial platform led to a new systematization plan in 1960, which based on the indications of the MIPCh, The State Committee for Architecture, Constructions and Systematization (CSACS) and the State Planning Committee (CSP) was supposed to take into account a population increment to 40.000 by 1975. In 1963 MIPCh would revise its development plans for the industrial platform and the The State Institute for Architecture, Constructions and Systematization (ISCAS) projected the population increase at 60.000 by 1980. This called for a new systematization plan in 1963⁸.

Third, the link between city dwelling and industrial production was partly achieved through the incorporation of the city into centralized utility and transportation networks. Graham and Marvin (1995, 170) pointed out, utility networks "link firms, organizations and households into wider economic and social structures" and "[a]s distributed networks, utilities – along with transportation – networks are the very 'glue' that hold together modern society (Graham & Marvin 1995, 170)". For example, the local heating infrastructure was developed together with the thermal power station. Designed to use residual resources from the refinery in the process of boiling the water, which would produce the steam that puts in motion the electricity generating turbines, the power station was initially supposed to deliver the electricity necessary to sustain the local industrial activity, desalinate the water used in the various technological process on the industrial platform and provide the heating of the platform and the city (Spătaru 1983).

Through this centralized infrastructure the heating of the city's apartments became entirely dependent on the process flow of the thermal power station. In 1963 this infrastructure sprawled from the power station with three pipelines suspended on pillars which descended into the underground before entering the city. From there it was re-composed into two axis that had ramifications for each neighbourhood, where a *punct termic* (thermal point) would control the ⁸ SJAN Bacău, fond ISO, 205/1963-1964 flow of hot water through the blocks' plumbing by opening and closing different valves. The plan estimated that new districts would consume between 6 and 16 Gcal/h and envisioned that by 1980 the expansion of the city would require the production of 276 Gcal/h of hot water and heat⁹.

This extension into the city of the coercive link between machinery and worker in the factory was trying to achieve a subsumption of all the social practices to production. The city, with its housing and socio-cultural facilities, would develop only as much as it was necessary to reproduce the labour power employed in the industrial activity of the state.

Socialist Governmentality and the Capitalist Mode of Production

After describing in the previous chapter how the city was subsumed to production through the links established by budgeting, demographic control and utility networks between the industrial area and the city, in this chapter I trace the development of Romania's state socialist governmentality. First, I do this by describing the linking of Oneşti's industrial site with other enterprises involved in the national oil industry and, second, the linking of Oneşti's industrial site with the global oil industry. My assertion is that all these connections were established through a multi-scalar process of systematization, engaged in the planning of cities, regions and the national territory. This socialist governmental procedure of systematization was being developed by different institutions and involved series of analysis, reflexions and calculations.

In describing modern states' power Foucault used the notion of *governmentality*. With this concept he defined the state as a set of "institutions, procedures, analyses and reflections, calculations and tactics" (Foucault 2007, 108) that constitute a "tool-kit" for exercising *biopower* (Foucault 2003). This is the power to dispose over the right to "make live and to let die" a population (Foucault 2003, 241), "a multiple body" (Foucault 2003, 245). The power of the modern state is precisely this biopower that emerges as the product of governmental knowledge practices, internal policing and external securitization.

Foucault was taking his examples mostly from Western Europe and North America. But, considering that Foucault fleetingly mentioned socialism in respect to biopower (Foucault 2003), it is not farfetched to try and use the notion of socialist governmentality. He mentioned towards the end of his 1975-1976 College de France lectures that

Socialism has made no critique to the theme of biopower, which developed at the end of the eighteenth century and throughout the nineteenth; it has in fact taken it up, developed, reimplanted, and modified it in certain respects, but it has certainly not reexamined its basis or its modes of working (Foucault 2003, 261).

Perhaps the most systematic approach to socialism as a form of governmentality is that of Stephen Collier (2011), who analyzed city-building in the Soviet Union as a form of exercising biopower. He argued that the Soviet Union developed a particular form of governmentality different from the liberal one. He noted that whereas policing norms in liberal governmentalities were reflective of contingent phenomena, the socialist governmentality developed in the Soviet union employed prescriptive norms based on a political ontology of teleological planning that "simply assumed that the entire field of collective life could be subject to instrumental control by the state" (Collier 2011, 56).

City-building, or *gradostroitel'stvo* is the Soviet Union equivalent of systematization. It too involved the subsumption of city population to industrial production and it too managed to do it by establishing the same links. Collier (2011) calls this subsumption the *enterprise-centric social modernity*. In it, the city is linked to the industrial production through budgets, demographics and utility infrastructures. The socialist states developed as these enterprises got linked to national transport and utility infrastructures – railways, highways, gas pipelines and electricity lines.

Following Collier (2011), the notion of socialist governmentality can be broadly used to refer to the set of institutions that manage and create these industrial cities and the networks they are embedded in with the purpose of transforming the population into a mean of production. This notion will help me to grasp what Kalb and Tak have called *critical junctions*, those dynamic and dialectic "relations through time, relations in space, relations of power and dependency (internal as well as external), ant the interstitial relations between nominally distinct domains such as economics, politics, law, the family, etc." (2005, 2-3).

Systematization in Romania developed from 1948 onwards precisely in this manner. Starting with this year several institutions were created, which were endowed with drawing plans of city and region systematization in accordance with five year plans and administrative divisions. Already connected to the national highway and railway infrastructures since the 19th century, by the end of the 1960s the Oneşti's industrial area got connected to the gas fields in Transylvania and the newly established national electricity grid.

Collier (2011) focuses mostly on the policing mechanism of the Soviet socialist governmentality, but fails to address the external securitization aspect of it. Because of this I want to focus on another transport network, the oil pipeline infrastructure that embedded the city into the global economy and subsumed its population to the capitalist mode of production. Most scholars writing about socialism have argued, or assumed that foreign trade is a residue in national economic planning, used to balance the economic plans' deficits, and that international trade is mostly done according to political preferences. It has also been argued that the growth of socialist economies was dependent on foreign trade, which took place under the auspices of the "free market" mechanism (Lavigne 1991). As Polanyi (1957, 248) has stated, the autarky of the Soviet Union's socialism was merely the result of "the passing capitalist internationalism". Nevertheless, as the latter was recovering after 1945 through the circulation of capital amassed in the United States in the form of aid, foreign direct investment or military production (Arrighi 1994), the Soviet Union's and its satellites' economic growth was becoming increasingly dependent on the world market.

I do not imply that the capitalist mode of production interacts, combines or articulates with a socialist one (Foster-Carter 1978). One the contrary, the latter is just one of the many forms the management of the production of objectified labor takes. Building on Negri (1991), I consider socialism as the ultimate rational consequence of the management of capitalist production, where political and economic power merge, not a mode of production in itself. Some authors have referred to this as state capitalism (Cliff 1974). Socialism is not different from the capitalist mode of production, socialism is part of it. As Foucault also noted, "socialism can only be implemented connected up to diverse types of governmentality" (Foucault 2000, 92). Its implementation in Eastern Europe and the Soviet Union could be made by connecting it to an internal hyper-administrative governmentality and externally with a liberal governmentality.

Even though the integration of socialist economies in the global economy is a contested matter (Chase-Dunn 1982), I follow the recent evaluation of Romania's economic performance made by Murgescu (2010), who argues that through the intensification of commercial trading with non-socialist countries since the late 1950s, socialist Romania managed to maintain a constant growth rate until the 1980s. Oil and petroleum products trade played a major role in Romania's foreign exchange economy. Having reserves of this resource within the boundaries of the territory governed by the state, the immediate postwar trade was characterized by exports of crude oil and semi-processed petroleum products. The development of the Romania state's refining capacities made possible the switch between the 1970s and 1980s to a political economy defined by imports of crude oil and exports of refined petroleum based commodities.

Systematization, in general, and Onești's development, in particular, was determined by this switch. By the end of the 1970s the petrochemical industrial site was connected through a pipeline with the oil extraction sites of the nearby Moinești area and by railway with the ones in the South of Romania. Beginning with the 1980s it was connected through a pipeline with the import oil terminal in the port of Constanța. The industrial production of the enterprises to which the city was attached became incorporated through this pipeline in what Hopkins and Wallerstein called a *global commodity chain*, "a network of labor and production processes whose end result in a finished commodity" (1986, 159).

The Oil Industry in the Trotuş Valley

After WWII, the split of Europe into spheres of influence, the initiation of the US aid plan in Western Europe and its attempts to gradually expand eastwards, as well as the weakening of the postwar *popular fronts* governments, advanced the imposition of the Stalinist model of development in Eastern Europe (Priestland 2009). The "Soviet blueprint", as the Stalinist development project is often referred to, was, according to Kligman and Verdery (2011), a "technological package" in which collectivization played the role of a formative experience for the party-state's cadres, that of assuring the state's source of capital accumulation for investment in industrialization and the freeing of the reserve army of labor from its agricultural means of subsistence. Nevertheless, the principles upon which the systematization was based were themselves part of this technological package. Itself was a formative experience for party cadres and an attempt at maximizing the usage of the capital resources offered by the collectivization of agriculture, mainly foodstuff and labor power.

In 1950 a commission composed of members from various ministries and committees, with the assistance of geographers from the Romanian Academy's Geography Institute, elaborated a territorial administrative division composed of 28 regions (*regiuni*) and 177 districts (*raioane*); later on the regions were redrawn and reduced to 16. But already since 1947 teams of geographers, architects, urbanists, sociologists and economists were being employed in making monographs of villages, cities and regions, identifying areas of industrial placement and propose plans for the settlement structure (Mihăilescu 1964).

In the Soviet Union these practices were based on the identification of *territorial production complexes*, which were defined by *energo-production cycles* (Kolosovskiy 1961, Lonsdale 1965). The latter referred to the

whole aggregate of production processes successively evolving in an economic region on the basis of a combination of a given kind of power and raw materials, from the primary forms – extraction and refinement of the raw materials – to all kinds of finished products which can be produced on the spot, on the initial premise that the manufactory is brought near to the sources of raw materials and power and that a rational use is made of all the components of the raw-material and energy resources (Kolosovskiy 1961, 7).

In two texts describing the process of selecting Onești in 1952 as the future place for an industrial area, Vintilă Mihăilescu (1964, 1974), the geographer coordinating the research project, does not mention the Soviet concept. Nevertheless, the reasons for choosing this place for the placement of a petrochemical industrial site seem to be informed by the Soviet concept since the description of the deciding factors resemble the elements defining a typical petroleum and energy-chemical cycle outlined by Kolosovsky (1961). This industrial area was supposed to be part of the industrial district *Trotuş Valley* (see Figure 5), one of the two the Bacău region had, composed of the industrial sites of Comănești (coal extraction, wood processing and electricity production), Moinești (oil extraction), Dărmănești (oil refining), Târgu Ocna (salt extraction), Onești and Borzești (oil refining, petrochemistry and electricity production) (Gherasimov et.al. 1960).

Although the selection of Oneşti for the new petrochemical industrial center occured in 1952, an interest in developing the district's potential can be noted since 1948 in a document compiled by the Soviet experts from the joint Soviet-Romanian company Sovrompetrol, which gave a detailed description of the Romanian oil industry at that moment. The document contained several suggestions regarding the measures to be taken for an increased production. In

the Moineşti district, it was claimed that there was a small number of drills and pumpjacks, thus limiting the full development of the area. It argued that further investment should be directed towards the acquisition of machinery. Besides that, this expert report suggested the intensification of geological surveys and mentioned that the development of production needed to overcome the burdensome working practices generated by rudimentary technology, the low efficiency drilling technique and the considerable distance from Romanian's industrial centers¹⁰.

In accordance with these suggestion, the State Planning Committee presentation of the first five year plan 1951-1955 announced new investments in the region¹¹. The re-technologized oil fields around Moinești and new wells opened across the Trotuş Valley led to the construction of the Dărmănești refinery in 1949, which by 1956 had a refining capacity of 1.800.000 t/year, out of a total of 10.920.000 t/year at national level, and to the beginning of the construction work for the petrochemical platform in Onești in 1952 (Ivănuş 2008)

By 1957 a Romanian expert commission drew a report in which it pointed out the continued decline of production and requested the lowering of the expected production figures for the next years of the second five year plan, otherwise export planned targets would not have been reached. These experts argued that the level of production reached in 1957 can be maintained only by drilling new exploitation and exploration wells and emphasized the lack of certainty as to the estimates of the output. They suggested as an alternative solution to intensify the exploitation of gas and coal reserves as well as the expansion and investment in cutting edge extraction technology, quality refining and petrochemistry, which could bring added value to the low production figures resulting from extraction¹². This changed the profile of the Onesti

¹⁰ ANIR, fond CC al PCR, Sectia Economica, dosar 3/1948

¹¹ ANIR, fond CC al PCR, Sectia Economică, dosar 20/1950

¹² ANIR, fond CC al PCR, Sectia Economica, dosar 12/1957

refinery, which by 1965 was one of the best equipped enterprises involved in the process of crude oil into fuel and for the petrochemical units to which it was connected (Ivănuş 2008).



Figure 5 The geography of the Trotuş Valley industrial district¹³

Investment in this area's oil industry since 1948 led to a restructuring of the district's network of settlements. In 1948 Oneşti had a population of 4.247, Comăneşti 8.549, Moineşti 5.868 and Târgu Ocna 9.796. By 1956 Oneşti had 11.253, Comăneşti 12.392, Moineşti 14.600 and Târgu Ocna 11.227. In 1966 the demography of the region's urban settlements changes completely with Oneşti reaching 35.663, Comăneşti 15.274, Moineşti 18.714 and Târgu Ocna 11.647. These ratios between the cities slightly changed, the only big difference reached in 1988 by Oneşti, which had a population of 54.048 compared with Moineşti, the second biggest city in the district, which had 23.432, closely followed by Comăneşti with 22.916 and a stagnant Târgu

CEU eTD Collection

¹³ Made with Google Maps

Ocna with 13.826 (Şandru et al 1989).

Cornel, whom I met during my fieldwork in the summer of 2014 in the city library, was born in 1941 and lived his first years in Buciumi, a village near Onești. His family moved in the mid-1950s to Târgu Ocna where he finished his primary school and began his secondary one. In the meantime he worked and got a qualification as a clockmaker in 1955. In 1962 he left for his military service, he got back in 1964. He said: "being young I could not stop here [being a clockmaker]. Moreover, many of my friends from Târgu Ocna worked as operators in Borzești and commuted with the train"¹⁴. In 1965 he married his partner who worked in the synthetic rubber factory lab, found a job at the refinery as a mechanic and moved into a studio in Onești.

This demographic change reflects the way in which investment for industry, as well as for social and cultural facilities was distributed in the district. The interest in developing middle sized industrial cities coupled with a new stronger emphasis on refining and petrochemistry processes in Oneşti, rather than extraction in Comăneşti, Moineşti or Târgu Ocna, or even services in the latter two, determined the distribution of the population of the industrial district. Even the geographer's classification of cities according to size (small, medium and big) and economic function (industrial, service, agriculture and mixed) reflected this interest (Şandru & Cucu 1964).

The 1963 *sistematizare* sketch reported that the 120 settlements around Oneşti were not properly developed and had limited economic opportunities and 50 of them had a population of 500 inhabitants (see Figure 6)¹⁵. Târgu Ocna, the closest city to Oneşti, at around 15km distance, was also considered poorly developed and with limited economic opportunities. They envisaged

¹⁴ Personal communication

¹⁵ SJAN, fond ISO, dosar 205/1963-1964

the transformation of the rural areas in agricultural intensive land that could support the food stock needed for the provisioning of the city's population, still dependent on far away producer zones. Moreover, Târgu Ocna was supposed to become a "bedroom city", and its extension would be done in Onești's direction. The latter's future extensions were also planned in Târgu Ocna's direction, probably the architects having in mind a future merge between the two¹⁶.



Figure 6 Onesti and some of the surrounding villages¹⁷

An oil pipeline infrastructure was built to connect the Moineşti extraction centers and the Dărmăneşti and Oneşti refineries (see Figure 7). This infrastructure was an important step in reducing the transportation costs involved in the usage of railways or highways. It was also a way of reducing losses from the loading and unloading of oil tankers and of better controlling and predicting the movement of oil. Most importantly it made these multiple spaces

¹⁶ SJAN, fond ISO, dosar 205/1963-1964

¹⁷ Made with Google Maps

interdependent and organized them into a hierarchical socio-technical system that defined and subsumed the entire district's population to the oil production process flow.

This infrastructure defined the scale of the production to which the city population of Oneşti, Dărmăneşti and Moineşti was subsumed. Most of the population of these cities was employed in activities of operating and maintaining this entire mechanism of production. For instance, in 1977 only in Oneşti 55, 8% of the total active population was employed in the industrial sector, which consisted mostly in the activities of the industrial area's enterprises (Şandru et al 1989).

Socialism goes Global

The mid-1950s saw a decline in oil output, but also in several other raw materials crucial for the exports that sustained Romania's first industrial drive between 1948 and 1952. This drawback led to the *new course* years (Montias 1967), when reserves of previously accumulated capital were spent in efforts to maintain the supplies of imported materials needed for the functioning of the new industrial sites, but also in the increase of labor productivity by improving living standards through investment in housing, light industry, retail and sanitation. But, the third five year plan 1960-1965, based on a recovery of food production for exports, presented a renewed industrialization drive, which led to the well-known tensions between Gheorghiu-Dej and Khrushchev and to the abandoning of the plan for the international division of labor among the countries which were part of the Council for Mutual Economic Assistance (Copilas 2010, Deletant 1999).

The refusal constituted a turning point in the articulation of a national socialism (Verdery

1995) and the re-establishment of commercial links with non-socialist countries (Lawson 1983, Linden 1986, Montias 1967, Radu 1981). This made Romania's political economy more connected with the global economy and thus more susceptible to changes in the capitalist markets. From the split onwards, machinery started to be increasingly imported from Western countries in exchange for raw or semi-processed commodities and raw commodities from independent former colonies in exchange for machinery – especially oil from the Middle East and North Africa.

The death of Gheorghiu-Dej in 1965 did not stop this industrial drive. On the contrary, the new party leader Nicolae Ceauşescu not only continued the industrialization plans, but he also intensified the trading relation and cultural exchanges with non-socialist countries. The second half of the 1960s brought many reforms to adjust the national economy to the global non-socialist markets. For example, administrative divisions were redrawn and instead of regions and districts, the national territory was configured into counties and new settlement classifications were conceived (Ronnås 1984). Systematization became an official policy in 1974 (Sampson 1984). The various disciplines involved in this biopower procedure started to articulate their own visions and argue for the best method of exercising this practice (Cucu 1977, Matei & Matei 1977, Oroveanu 1986). The industry's administration and of foreign trade also changed. The former received a greater autonomy and were grouped in *centrale*, which were more engaged in the foreign trade process (Turnock 1986).

In the systematization literature, the population stopped being defined only in relation to the national state's settlement structure. Romania's population was now part of the world population (Cucu 1977) and developments in world politics were to offer the conditions to proceed with an interstate systematization, a macro-territorial systematization (*sistematizare* *macroteritorială*) (Gusti 1974). At the same time, the emphasis was displaced from the creation of spaces, either urban or regional, to the regulation of already existing ones. In this period, the socialist governmentality was being adjusted to the liberal one (Foucault 2007, 2008).



*Figure 7 The national oil pipeline infrastructure of the state owned company Conpet*¹⁸ Between 1961-1970 30, 9% of the total investments in the county the Trotus Valley was

located were directed towards Oneşti's industrial development. The amount gradually increased to 43, 2% in 1976-1984. Simultaneously, despite the change of focus since the 1960s in the oil and chemicals industry on intensive growth and an increase in the crude oil production at 13.400.000 tons in 1970, reaching a maximum peak of 15.000.000 in 1975, Romania started to expand its petrochemical processing capacities and began importing. In 1970 the amount of imported oil was of 2.300.000 tons, in 1980 the imported amount of 16.000.000 tons exceeded the national oil output, which dropped at 11.500.000 tons (Murgescu 2010). In the mid-1970s

¹⁸ http://www.conpet.ro/en/index.html

work on a new refinery, next to the first one, started in Oneşti's industrial area. This was connected to the oil terminal in the port of Constanța through a pipeline (see Figure 7). By 1990 the Oneşti refinery had the second largest processing capacity in Romania with a total of 5.250.000 t/year, out of which 3.500.000 imported crude oil.

These crude oil imports until the late 1970s were based on several barter contracts Romania had made with Middle East and North African Countries. Most of the time these involved the exchange of services, technology and machinery in return for crude oil (Alvandi & Gheorghe 2014, Becheru 2015). Based on these long term supply contracts, Romania engaged in the expansion of its refining capacities, with the help of credit from the Western banks. The entrenchment of the socialist governmentality in the capitalist mode of production was made evident by the impact changes happening in the oil and credit supplier states. Wars in and between Iran and Iraq, two of the major oil suppliers, which led to an increase in world prices and lower exports and the increase in debt interest rates in the United States and Western Europe that followed, led to an acute crisis that was coped with by austerity measures (Ban 2012).

These measures consisted in the limitation of all imports, except for oil supplies, and the state budget was still distributed in favor of industrial expansion. Also, limitations on fuel and electricity use were imposed. In this way, the government hoped to be able to save energetic resources and transform crude oil in products with added value that would help pay off the creditors. In the end, this strategy turned out to be a failure (Murgescu 2010). The absence of machinery imports lowered the productivity levels, the local industry being unable to supply the necessary machineries and thus forcing managers to encourage the prolonged life of already existing technology. Cornel, who by then finished his secondary education and obtained a partial engineering degree that allowed him to become chief of a mechanics working group, recalls that

"it was being said 'do some more repairing, some more repairing, some more patching'. There was not enough hard currency. We wanted new spare parts from our foreign partners, because we had compressors from Czechoslovakia, the Soviet Union, England. They were saying 'we have some hard currency, which we need to buy raw materials"¹⁹.

This had an impact on the quality of exported commodities, for which it was harder to find a profitable market. Moreover, the disregard of basic consumer goods and the decline in working conditions contributed to an emerging dissatisfaction among the population, which eventually took the streets in 1989 (Ban 2012). The same Cornel remembers how difficult it was when getting back from work he stopped and waited in one of the queues formed in front of the grocery stores. He said to me that most of the people did not even know what they were waiting for, they just waited for something to come and have. Sometimes after two or three hours of waiting he would leave, losing the hope that something will eventually be there to buy.

In this chapter I described how the city of Oneşti was part of the making of the socialist state. Through systematization the population of the city was embedded into a socio-technical system that subsumed it to the national and global oil industry. Nevertheless, this process changed throughout the years. Initially the socialist governmentality developed a hyperadministrative, autarkic state where the political power merged with the economic one, reaching the highest rational form of capital production and accumulation. Soon it was clear that this process can be sustained only through linking the national production with global production. This ignited a series of changes in the socialist governmentality that made it more attuned to the liberal governmentalities of the world markets. In the next chapter I will show how these changes had an effect on the making of the population of Oneşti, which in turn reacted in a manner that

¹⁹ Personal communication

would contribute to the redefinition of the socialist governmentality.

Subjectifying Governmentality

In the previous chapters of this thesis I dealt with the institutions and instruments employed in the making of the Romanian socialist state. I outlined the way in which the systematization of Oneşti consisted in the multi-scalar subsumption of its population to capital production. The creation of a population as an object to be governed implied the creation of subjects composing the population as an effect and target of biopower. At the same time it creates subjects, it also creates the potential for *subjectification* (Rancière 1999), the subjects' potential to redefine the tactics, calculations and institutions that create subjects and compose them in relation to a population. The adjustments of the socialist governmentality were not only a result of its interaction with the non-socialist ones encountered in the world market, but also a result of the population's acts of subjectification. I dwell in this last section on instances of subjectification in order to highlight the adjustment of socialist governmentality's total planning of social practices to the liberal governmentality present in the global economy.

For this purpose I return to the discussion began in the first chapter related to the link established at the level of individual bodies between machine and worker, and at the social level between machinery, as fixed capital, and labour. I want to describe how this coercive link is not, once established, unbreakable. Instead, it is a recurrent struggle between the two sides (Negri 1991), whose outcome is the redefinition, or refinement of the governmental tool-kit.

Reports from the 1960s of party committees that were producing a type of knowledge akin to that of ethnographic practices (Cucu 2014) present the situations that lead to below target productivity in the Trotuş Valley oil industry in terms of "objective" and "subjective" factors. The former are conditions that cannot be avoided, whereas the latter are human mistakes. In all cases, the reports blame the presence of subjective factors on the work of the local party organizations and prescribe a list of practices that have to be intensified. What emerges from these reports is the mediation role of technology in the relation between the party and the workers. Through the relation between technology and worker, the party was introducing different claims for the need to discipline the latter. Hence, there is a point in one of those reports' list of instructions saying that "in order to remove workplace misbehaviour, seen in some of the activities analysed, the party organizations must be directed to encourage the mass organizations²⁰ to educate the workers through the most efficient means"²¹.

These actions never managed to achieve their proposed goals. As Cucu notes, this was less due to a lack of knowledge of the state's subjects and more to "an in-built tension between knowing and acting simultaneously as a workers' state and as a manager-state" (2014, 229). Verdery (1996) pointed two reasons for these tensions. First, the central planning tended to generate budget padding and material hoarding causing a shortage of resources. Labour was one of these resources, which in this shortage context achieved a certain level of control over the production process. Second, the party directives that were pushed by the trade unions and other mass organization created resentful workers. These two produced what Verdery has called a "cult of nonwork" that led to a sort of "internal sabotage, which by reducing productivity deepened the problems of socialist economies to the point of crisis" (1996, 23).

This situation was extended in the link established between the industrial area and the city. Since the city construction was financed by the industrial enterprises that were experiencing resource shortages, the city was *underurbanized*, as most of the socialist cities in Eastern Europe

²⁰ This term designated those organizations endowed with the role of mobilizing workers that were not part of the communist party.

²¹ ANIR, fond CC al PCR, sectia economic, dosar 28/1961

were (Szelényi 1996). The 1963 systematization sketch presented a distribution of population where out of 46.000 inhabitants, 23.760 lived in new housing constructions, 9.820 in temporary barracks, 7.770 in houses with "village character", but in the city, and 4.640 in the nearby villages. The same document reports that the average number per family living in the new constructions is 2, 43 persons, that the living surface per dweller is of 10m2 and that most of the dwellers worked in the enterprises of the industrial area²². In a regional party organization report regarding the work and working conditions in the construction sites of Oneşti, the barracks were presented as places where most of the inhabitants come from the villages and have "different habits and practices". They get late to work or do not come at all, waste resources and during the free time engage in "violent acts". They live in an indescribable mess and their rooms are filled with bedbugs²³.

Moreover, the legislation for the distribution of living space tried to cope with the housing shortage but created situations in which an apartment would be occupied by two or more families (Chelcea 2012, Mărginean 2015), the houses with a "village character" remained disconnected from the utility networks and social and cultural facilities were, according to the systematization sketch, "inadequate". By the end of the 1960s, the situation hardly changed and research revealed the difficulty in creating a stable population because of that (Culea 1970). Systematization plans took in consideration the eventual demolition of the barracks and rural dwelling structures, the building of new public housing blocks and it proposed the building of several social and cultural facilities. But until the early 1990s the achievements were an expanded housing stock, still insufficient, a hospital and a *house of culture*, a sport centre and several stadiums.

²² SJAN, fond ISO, dosar 205/1963-1964

²³ ANIR, fond CC al PCR, sectia economica, dosar 24/1961

The shortage of resources industrial enterprises were experiencing made the full urbanization of Oneşți a gradual, tedious and incomplete process. More than that, it made the distribution of apartments get out of the local authorities' control. Apartments soon got integrated in what scholars called the second, or informal economy (Böröcz 1992, Sampson 1987). All of the persons I interviewed during the fieldwork mention how they had to rely on an "acquaintance" to shorten the lengthy bureaucratic process of receiving an apartment, which sometimes, if lucky, took between 1 to 2 years.

This situation was intermingled with the various reforms starting in mid-1960s that were adjusting socialist governmentality to the global capitalist markets. Verdery (1996) has argued that these adjustments were made because of the party's unwillingness to engage in structural reforms. This strategy, as described in the previous section, was not successful. On the contrary, the changes in the global economy to which Oneşti was subsumed through the oil industry led to further adjustments that intensified the second economy activity, which was also the main way of procuring goods for basic needs. The "energy crisis" to which the party replied with the limitation of energy consumption determined the local population to engage in the systematic hacking of the oil flow infrastructures.

With the start of the Romania Dacia cars production in the late 1960s, the circulation of persons and goods in the second economy became highly dependent on these cars (Gatejel 2011). In 1979 a decree was passed that limited the consumption of fuel. This had was to have an effect on the population mobility and second economy networks. Nevertheless, like other shortages the fuel one also led to the development of a fuel secondary economy in Oneşti. With the refinery nearby, these activities blossomed. Fuel was taken by workers for their personal use or for its commercialisation in various ways. Some took it in shampoo bottles. Others used

canisters. Some were doing business, making deals with drivers and tried to trick the weighting of the tank trucks. The most frequent ways of taking fuel were through activities of hacking the infrastructures that linked Onești with the national or global sites of production. The pipeline that got often poked was the one from the Dărmănești refinery to the Onești one. Ionel, a retired refinery worker told me that "every day they were drilling holes in it and stole gasoline, with bags, with the cars at night. There were holes everywhere. Locksmiths were often called to patch them. It was pierced from Dărmănești until Onești".

Unlike the workers in the coal mining sector in *Valea Jiului*, who in 1977 went on one of the biggest strikes from that period because of the impact the "energy crisis" had on them (Kideckel 2009), the workers in Oneşti sabotaged the oil flow infrastructures through their hacking. Both actions contributed to the subjectification of the socialist governmentality, yet these took different forms. Timothy Mitchell (2011) argues that the socio-technical systems that make the coal and oil flows possible are assembled in different manners and thus control over the oil flows and the practices of disrupting them are also manifested differently.

It would be wrong to romanticize these sabotage practices and claim these were some sort of weapons of the weak (Scott 1985). In most of the cases, these acts of sabotage had the purpose of stealing oil for the benefit of a few, some of which accumulated sufficient resources in this manner to deploy in entrepreneurial activities during the 1990s (Eyal et al 1998). In Romania, the accumulation of resources through the second economy was not tolerated as it was for example in Hungary. These practices were made illegal and controlled through the passing in 1968 of the law of the "illicit", which stated that controls of one's goods could be made if a person or an institution made a complaint regarding the disproportionate amount of goods one has in comparison with her sources of income. Still, this did not stop everyone from engaging in such endeavours. Ionel recalled someone who, living in an area of the city with houses that still had the "village character", having the Dărmănești-Onești pipeline passing through his small garden plot, dug until he reached the pipeline, pierced it and redirected the flow of oil to his house where he controlled it with a tap. He said to me that "they got him (...) he was a millionaire. He had loads of money (*avea bani de rupea pamântul*)".

It was through these sort of practices that the socialist governmentality was subjectified and gradually weakened until the point of its turn to an overtly (neo)liberal governmentality during the 1990s. Although in the work of Negri (1991) the relation between technology and labour is a recurrent struggle that in the end creates a working class subjectivity forging the communist society from within the capitalist structures, the examples I just provided show a rather dissimilar situation. Both the inability of the socialist governmentality to completely subsume the population and the case of the sabotaging of the oil infrastructures contributed to the de-centralization of politics and capital from the hands of the state, yet it failed to completely subsume capital to labour. The second economy, which was develop because of the various shortages in the socialist economy, was not an escape from socialist governmentality but its redefinition from within according to different institutions, calculation and knowledge practices. It bred the post-socialist entrepreneurs and it eventually contributed to the clearing of the socialist governmentality obstacles encountered by global forces through the articulation of the (neo)liberal governmentality of the postsocialist state.

Conclusion

In February 2015 the refinery's management, by now owned 96% by Petrochemical Holding Gmbh, Russian businessman's Yakov Goldovski Vienna officially announced it will begin the procedure of selling all of the company's assets, including what was left of its technical equipment. Romania's most popular economic newspaper published on the 4th of February an article titled "Industrial drama at Oneşti: RAFO will be dismantled and sold as scrap metal"²⁴. But for some commentators this move was anticipated in 2013 when the management decided to sell its land assets, its train wagons and locomotives and the remaining crude oil reserve stocked in the Constanta-Oneşti pipeline to pay its last 400 employees. A spokesman of CONPET, the state owned company that manages the oil pipeline infrastructure, said that "[i]f they ever want to start receiving crude oil on the pipeline, they should remake this reserve. But, they did not tell us anything in this regard"²⁵.

Since the beginning of the 1990s Oneşti, and similar socialist cities in Romania and Eastern Europe, became for the new ruling classes sites of justifying the failures of socialism and the loci of possible successful capitalist stories. By the beginning of the second post-socialist decade, most of the state owned industries got privatized, new management techniques were employed and the majority of the industrial workers were laid off, or forced into retirement. The 2015 decision of Rafo's administration was only the tip of the iceberg. Before it, both of the thermal power stations got closed. At the time of my research one of them was completely demolished, while another was being liquidated. The other enterprises soon got closed too. The only one still producing, after restructurings and layoffs, is the chemicals factory, which had in

 $^{^{24}\} http://www.zf.ro/burse-fonduri-mutuale/drama-industriala-la-onesti-rafo-va-fi-dezmembrata-si-vanduta-la-fier-vechi-13802294$

²⁵ http://www.energynomics.ro/povestea-rafo-ajunge-la-final-rafinaria-va-fi-vanduta-pe-bucati/

2014 704 employees.

These cities have been seen as a process of urban decline, sustainable shrinking or nested urbanism. The assumption behind these perspectives is that what happens to secondary socialist cities in post socialist Eastern Europe is a result of the poor strategies of development implemented since 1945. These made it hard for cities like Oneşti to integrate into the global economy. But as I have showed Oneşti was already part of it the latter. Through the systematization, the city was conceived as a governmental procedure of subsuming the population to the production of capital, which was interlinked at national and global level. Changes in the socialist governmentality began already in the 1960s and were the result of both external factors, like the global economy, as well as internal, like the population's subjectifications.

I analysed the city systematization of Oneşti in order to see how experts conceived the subsumption of the city to the process flow of the industry it was attached to. This was done through budgeting, demographics and utility networks. The production of the industrial enterprises would determine the investments in the city housing stock and socio-cultural infrastructures. When this was low, the investments dropped. Demographic limits were also imposed according to a ratio that did not allow the expansion of the city more than the industrial enterprises could absorb. Moreover, the connection between the industrial site and the city was established through the heating infrastructure, which was determined by the thermal power station production. The latter was crucial in a place in which, as I described in the first lines of this thesis, winters can be excruciatingly cold.

The city of Onești was part of a multiscalar process of systematization that extended the subsumption of the city to the national and global industrial production of oil. The city was

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embedded in oil transport pipeline networks that enrolled it in a hierarchical socio-technical system, which contributed to the creation of a global commodity chain. This was a gradual development of the socialist governmentality since the 1950s, which got intensified during the 1970s renewed industrial drive under the leadership of Nicolae Ceauşescu. At that time Romania switch from an economy based on oil exporting to one that imported oil and exported added value petroleum commodities. But this switch was made possible only through the adjustment of the socialist governmentality to the global capitalist mode of production.

City inhabitants developed practices of subjectification, which contributed to redefinition of the socialist governmentality in the 1970s and then the turn to the (neo)liberal one in the 1990s. The population develop a second economy, in which basic needs good were exchange, but also the means of acquiring them. Fuel became a limited, yet important resource for overcoming the austerity measure of the 1980s that saw the rationing of staple food consumption. The oil infrastructures to which the industrial area was connected became targets of recurrent hacks for the procurement of fuel. But, rather than constituting "weapons of the weak", these were practices that while redefining socialist governmentality it contributed to the specific re-articulation of class divisions during postsocialism.

Coming back to the scene I described in the introduction I want to propose a different perspective on second tier cities in Eastern Europe. These should not be ignored for not being global enough, nor seen as residues of national socialist parochialism. The case of Oneşti presents a complex situation to which dichotomies global/local, and socialist/capitalist can not provide an answer. Instead one should look at how the becoming scrap of the socio-technical system that made Oneşti subsumed to the global economy has led to new technologies of subsuming the city population and new forms of subjectification.

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