

# 5 Changing times, persistent inequalities?

## Patterns of housing infrastructure development in the South Caucasus

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### Introduction

Yerevan and Tbilisi – the capital cities of the two former Soviet republics of Armenia and Georgia in the South Caucasus – enjoyed spectacular population and territorial growth during the 70 years of Soviet power. The population of Yerevan grew from fewer than 50,000 in the early 1920s to more than 1.1 million in the late 1980s, amounting to more than half the total urban population of the republic, while Tbilisi's population in the same period increased from about 200,000 to more than 1.2 million (more than 40 per cent of the urban population of Georgia). As in many large Soviet cities, housing development has been a main driver for spatial growth, especially since the 1960s, when the mass housing programmes began in the main cities all over the Soviet Union to overcome the scarcity of housing stock caused by rapid population and economic growth.

The provision of accessible and decent living conditions to everyone was one of the communist mantras. In this regard, housing was an essential and integral part of the basic public infrastructural complex, interlinked with many other infrastructural components, both social and technical, such as schools and kindergartens, roads, and green areas on the one hand, and electricity, sewage, water and gas networks on the other. Remarkably, the provision and maintenance of housing were performed by the state agency in a way quite similar to other infrastructure. We are therefore inclined in this chapter to consider housing itself as an infrastructure consisting of multiple internal (living spaces, utilities) and external (courtyards, roads, greenery) components. Although the above-mentioned housing concept – housing for everyone – was challenged after the collapse of the Soviet Union and resulted in marketization of the housing supply, it did not completely alter the existing overall picture but added new features to housing development and distribution. These are reasons why we argue that the consideration of housing as infrastructure is sufficiently justified and rightful.

The link between inequality and the availability of and access to infrastructure in general has been long attested (most famously in Graham and Marvin, 2001). As it has been argued, the solutions to infrastructural

problems most benefit those with better access to resources, while the poor are affected most negatively (Silver, 2015). In this chapter, we explore the nexus between housing as an infrastructure (a complex set of technical utilities, and social and environmental services within individual houses and their close surroundings) and social inequality – that is, the differentiated access to resources based on class and/or other social markers. Considering these, we investigate the cases of Tbilisi and Yerevan, specifically focusing on the mass housing constructed and allocated between 1950 and 1990. Two perspectives guide our analysis:

- (a) How and to what extent has the production of housing infrastructure – that is, its planning, construction, and allocation, influenced urban socio-spatial inequalities when embedded within the Soviet housing system and private housing market respectively?
- (b) How and to what extent do these social inequalities affect housing infrastructures, their maintenance and provision?

Our empirical analysis is based on 71 carefully administered interviews, 39 of which come from Yerevan and 32 from Tbilisi. The interviews were conducted in a convenient environment for the respondents, either at their homes or in the courtyards of the residential apartments. The interviews, conducted as semi-structured discussions, explored topics such as the history of their moving to the residence, their attitudes towards the changing physical and social environment in the neighbourhood, and patterns of residential mobility. The interviews took place in the spring and summer of 2015.

First, we review relevant literature on infrastructures with specific focus on housing as infrastructure. Additionally, we present several empirical and theoretical propositions on inequality during socialism and afterwards. We then explore the peculiarities and the trajectories of urban infrastructural development in Tbilisi and Yerevan. Based on the materials from in-depth interviews, we analyse perceptions of the physical changes to housing infrastructure and the differentiated practices of infrastructure maintenance, with a specific focus on inequality. Finally, we discuss the findings through the lens of relevant theoretical concepts.

## **Housing as infrastructure**

Contemporary debates on urban infrastructure often treat it as embedded into the urban fabric and only visible upon its breakdown (Graham and Marvin, 2001; Star, 1999; Star and Ruhleder, 1996). Infrastructural disruptions alleviate underlying inequalities by providing a way for the commodification of infrastructure and its provision (Graham, 2010, McFarlane, 2010). On these occasions, as Larkin (2013, p. 336) argues, infrastructures (and infrastructural projects) ‘move from unseen’, thus asserting their visibility and symbolic meaning (Amin, 2014). Tonkiss (2014, p. 362) suggests considering

infrastructures as relational and ecological, because both these concepts shape the relationships between humans and material things, and also determine the nature of the environment where these relationships occur.

The Marxian definition of infrastructure presents it as the basic resource for a functioning society. As Humphrey (2003, p. 92) argues, infrastructure in the Soviet Union, especially in the first years of its existence, was perceived as ‘the economic basis’ for societal reproduction. In the Soviet Union, apart from the normative meaning, infrastructure symbolized how governmentality was exercised (Larkin, 2013). Infrastructure was taken for granted in the Soviet Union, and it was assumed that it would be provided even in places that had few if any conditions for living, even at the expense of vast capital investments (Humphrey, 2003, p. 93). Indeed, the right to housing was guaranteed by the constitution of the Soviet Union (e.g. in article 44 of the 1977 USSR constitution).

The atomized concept of ‘home’ has been an important focus of thought for various schools of Anglo-American geography and environmental psychology (Moore, 2000). These works explored the emotional attachment to home as a place (Lewicka, 2011; Manzo, 2003; Rakoff, 1977). It needn’t be said that infrastructures similar to housing are experienced and ‘woven into the fabric of society’ (Carse, 2016, p. 35), and moreover reflect the dominant political narratives of progress and modernization articulated by the ruling classes (discussed, for example, in Collier, 2011; Graham and Marvin, 2001; Harvey and Knox, 2012). Indeed, the symbolic meaning of infrastructure (elaborated in this volume by Tuvikene, Sgibnev and Neugebauer, Chapter 1), in the Soviet Union especially, as readily and universally accessible housing, promised social justice and overall prosperity for all urban dwellers (e.g. in Smith, 1996; Sýkora, 2009), and was thought to anticipate the construction of a new society (Humphrey, 2005). Another symbolic meaning of housing as an infrastructure was the metaphor that proposed the ‘nation’ as the house for the multi-ethnic society, where each people *possessed* its *own* apartment (e.g. in Slezkine, 1994).

Soviet-era housing, despite being projected as egalitarian, was neither ‘created equally’ nor ‘universally accessible’ (Alexeev, 1988b). The dire state of housing provision in the country (Gerasimova, 1998) necessitated large-scale mass housing construction programmes. The Soviet urban planning school invented a basic planning unit for several thousand inhabitants, the microrayon (Herman, 1971; Hess, 2017). This represented the essential building blocks for socialist cityscape assemblages and contained bundled (see also Graham and Marvin, 2001) infrastructures such as blocks of flats, roads, electricity grids, water, heat and gas supply, schools, kindergartens, and grocery shops.

Thus, although an overall provision of utilities, public open spaces, social facilities and other infrastructure was considered to be similar and standard-based, certain disparities have been observed from district to district in terms of better/worse geographic location of housing units and residential estates,

quality and quantity of living spaces, design and arrangement of public spaces and, sometimes, provision of basic utilities and communal services (Gentile and Sjöberg, 2010). Such inequality had a strong impact on initial allocation and further redistribution of housing among different population groups according to their social, ethnic, and professional belonging, as well as the ability to negotiate with actors of the decision-making and housing distribution systems.

Perennial crisis in the Soviet housing construction sector (Morton, 1979) created fertile ground for creation of inequalities in a seemingly egalitarian society. Housing construction and allocation in the Soviet Union reflected both formal (Gentile and Sjöberg, 2006) and informal (Morton, 1980) power geometries. Entities operating in the priority sectors of the national economy (Szelenyi, 1987), for example, the military defence sector (Gentile and Sjöberg, 2010), and powerful state establishments, such as law enforcement agencies and Communist Party institutions (Gentile and Sjöberg, 2010; Smith, 1996), were able to secure quality housing through their formally assigned power resources. But because the Soviet Union also possessed an all-embracing second economy (Kim, 2003; O'Hearn, 1980), the institution of informal networks of loyalty, so-called *blat*<sup>1</sup> (Ledeneva, 1998), was a powerful source of 'housing manipulations' as well (Morton, 1980). The socio-spatial pattern of housing provision in the cities was even further complicated by ethnic differences (Gentile and Tammaru, 2006; Hess et al., 2012; Sýkora and Bouzarovski, 2012).

The dissolution of the Soviet Union brought immense changes, including to infrastructure. The economies of the former Soviet republics shrank enormously. The newly 'unblackboxed' (Graham, 2000) water, electricity, and heating infrastructures pushed the urbanites to 'micrological' (Collier and Way, 2004, p. 267) interventions: in the 2003 film documentary, *Power trip*, directed by Paul Devlin, illegal individual electricity wires and water pipes represented practices of coping with dilapidation of infrastructure caused by a lack of maintenance.

Neoliberal economic policies, especially the overarching privatization of the housing stock, exacerbated socio-spatial inequalities in urban space. The privatization of the formerly state-owned housing stock and the shortage of affordable housing in post-socialist cities helped to maintain relatively low residential mobility, offering certain housing options to the socially weak but often trapping average-income households and enabling only the most well-off to choose and move freely (Gentile and Marcińczak, 2014; Neugebauer and Kovacs, 2015; Ruoppila and Kährik, 2003). These market conditions seemingly 'froze' the existing urban social geographies (Sýkora and Bouzarovski, 2012) and the socialist pattern of bundled infrastructures: many residents are still living in their centrally planned and more or less well infrastructured microrayons. However, the neoliberal turn with its reforms towards privatization and individualization means the unbundling of housing as infrastructure and splintering urbanism. This we

will discuss when looking at new in-fill housing construction in Tbilisi and Yerevan and at infrastructural developments in the Soviet microrayons.

### **Setting the context: shared trajectories of urban development**

The contemporary physical and social fabrics of Tbilisi and Yerevan have been shaped by the events that took place after the dissolution of the Soviet Union and were contained in the Soviet-era socio-demographic, infrastructural and, to a certain extent, institutional conditions. The bulk of urban infrastructure, while a Soviet relic, is widely utilized. Only about 10 per cent of households in the capital cities of Armenia and Georgia reside in housing estates constructed after independence (Salukvadze, 2016). During the Soviet period, the population of Yerevan increased eighteenfold while the population of Tbilisi grew fivefold. The two cities housed from one fifth to one quarter of the population of their respective republics and played an oversized role in national economics (Gachechiladze et al., 1984). Such an explosion of population and industries yielded the physical expansion of the two cities to the outskirts. The population of Tbilisi mainly grew thanks to ethnic Georgians moving from other parts of the Georgian Soviet Socialist Republic (SSR), while Yerevan absorbed newcomers from both the Armenian SSR proper and from other parts of the Caucasus, as well as via repatriates from the Middle East and Western Europe (Pattie, 2004).

Master plans played the most crucial role in shaping the physical characteristics of the city because they provided an outline for development usually 30 years ahead (Herman, 1971; Salukvadze et al., 2010). Such regulatory documents were developed three times for Tbilisi and four times for Yerevan.<sup>2</sup> Among others, general plans provided a blueprint for housing provision, which with very few exceptions<sup>3</sup> was planned, administered, and constructed by state institutions. In Tbilisi, new housing microrayons stretched along the Kura river, since the pre-revolutionary city core had already been developed. Unlike Tbilisi, Yerevan possessed negligible pre-Soviet urban infrastructure. The Armenian capital was built almost from scratch around a small historical core.

The urgent need for mass housing outweighed considerations of quality, and housing construction and allocation therefore did not always comply with rules of quality or of equality (Alexeev, 1988a; Morton, 1979). Therefore, the scarcity of goods and the inefficiency of allocation were countered with a widespread second economy (Mars and Altman, 1983; Scott, 2016), which according to various estimations (e.g. by Kim, 2003; Kim and Shida, 2014) accounted for about 15–20 per cent of the national economy of the Armenian SSR, and for 27–33 per cent of the Georgian SSR. Although illegal housing markets existed almost everywhere in the Soviet Union (Katsenelinboigen, 1977), and ‘housing manipulations’ – that is, the exploitation of one’s power in order to receive quality housing on time

(Marcinćzak et al., 2013) – were especially widespread in the republics of the South Caucasus (Morton, 1980).

Housing manipulations in the South Caucasus capital cities can be attested to in the archival documents recording patterns of housing construction. On average, apartments constructed in Tbilisi and Yerevan between 1950 and 1990 were about 37 square metres in size. However, the floor space fluctuated greatly across the industries and institutions doing the construction. The average floor space of an apartment in a house constructed through the Georgian Communist Party was about 53 square metres, followed by the planning committees of Georgia (50 square metres) and Tbilisi communal services (48 square metres). The disparity was less pronounced in Yerevan, where the most privileged sectors of the economy (machinery building, science and education, and communications) would be allocated 40-square-metre apartments on average.

The dissolution of the Soviet Union, which brought capitalism with all its perils to the South Caucasus, created the distinctive context (Golubchikov et al., 2014) in which the two cities are now operating. Populations expelled as the result of ethnic conflicts in the former autonomous regions of Abkhazia, South Ossetia, and Nagorno-Karabakh, as well as in Azerbaijan, created waves of internally displaced populations and refugees – mainly ethnic Armenians and Georgians who sought shelter in the capital cities. The displaced population was mainly housed in former government buildings such as hotels, university lodgings, and former scientific and educational institutions (Salukvadze et al., 2013). The governments in both countries employed an exclusively neoliberal ‘developmental’ approach to the ‘temporary integration’ of the new populations into the mainstream societies, which also included the privatization of the refugee camps (Manning, 2009). Armenia’s housing crisis and the low quality of existing stock were also exacerbated by the devastating earthquake of 1988, which caused significant forced displacement (Sargsyan, 2013).

The rapid privatization of the housing stock, which was undertaken in Georgia in 1991 and in Armenia in 1993, not only created a new class of ‘poor home-owners’ (Van Assche and Salukvadze, 2012) but also froze the existing socio-spatial disparities that now imbue the contemporary unequal economic geographies of the two cities. Privatization also meant that market forces would now regulate both the demand and supply side of housing construction, maintenance, and allocation. The state withdrew from the provision of most social security (Collier and Way, 2004), including housing, and triggered the emergence of various types of new ‘urbanisms’, including apartment building extensions and illegal land squatting (Bouzarovski et al., 2011; Stephens, 2005).

The economies of the two republics suffered enormously as a result of the dissolution of the Soviet Union. For example, between 1990 and 1994, the economy of Armenia cumulatively declined by 61 per cent while Georgia’s shrank by 85 per cent relative to 1990 (Sachs et al., 1995). On top of that,

Armenia was involved in a violent armed conflict with Azerbaijan over the Nagorno-Karabakh province (De Waal, 2013), which led to an economic blockade from Azerbaijan and Turkey in the mid-1990s and chronic electricity blackouts referred to as the 'Dark Years' (Ter-Ghazaryan, 2013).

Post-Soviet transition in Yerevan and Tbilisi took place against the backdrop of harsh political instability, economic decline, disruption of institutions, and population out-migration, during which both cities lost up to 200,000 inhabitants each. In the meantime, both Yerevan and Tbilisi experienced dramatic urban transformation driven by the introduction of radical neoliberal approaches, which also brought immense changes to housing development. Foremost, overwhelming privatization of dwellings took place after which, by the 1990s, Armenia and Georgia, and their respective capital cities, had already become the world leaders in housing privatization, consequently reaching 96 and 95 per cent of their housing stock respectively (UNECE, 2004; von Schweinichen, 2007). This was followed by the privatization of most utility service provisions and the destatization of construction business and building maintenance. The production of new housing occurred only on a commercial basis, often under conditions of ignorance of spatial planning and deregulation of building norms and rules. All these changes affected patterns of mobility and residential perceptions and attitudes towards housing and (housing) infrastructure (Herfert et al., 2013). They resulted in a significant transformation of housing units and housing landscapes on the one hand, and caused the social reconfiguration of residential districts and inflamed existing socio-spatial inequalities on the other.

Economic decline led to huge waves of out-migration from the capital cities, compensated by the influx of internal migrants. Needless to say, the remittances from the working migrants – and in the case of Yerevan, from the powerful Armenian diaspora – significantly contributed to the local housing markets (and to the inequalities). Typically, in both cities, households receiving remittances were more likely to invest the funds in improving living conditions (Manookian and Tolosa, 2011), while real estate developers especially targeted Georgians (and Armenians) living abroad with luxury, newly built high-rise apartments (Gentile et al., 2015; Salukvadze, 2016). The diaspora contributed greatly to the physical infrastructure of Yerevan by investing in luxury condos and gated communities (Petrosyan, 2016; Topalian and Petrosyan, 2015).

Although the roads of political development in the two countries diverged from the beginning of the 2000s, the characteristics of their economic policies did not differ much. While, after the infamous Rose Revolution, the Georgian government declared its alignment to Western-style democracy and announced its integration into European and Euro-Atlantic organizations as ultimate goals (De Waal, 2011), Armenia never did so. Governments in Armenia and Georgia to varying extents embraced a neoliberal economic model (Gugushvili, 2016; Ishkanian, 2014). The economic boom in the early and mid-2000s, and the accompanying process of planning deregulation,

effectively created a new player on the housing market. Small development/investment agencies started in-fill constructions in the central areas of the two cities (Van Assche and Salukvadze, 2012; Van Assche et al., 2012; Salukvadze and Golubchikov, 2016). The boom cycle was disrupted by the economic crisis of 2008. However, major flagship urban development projects, such as the Northern Avenue in Yerevan, soon began. New housing developments are currently almost completely conducted by the private sector (Sargsyan, 2013). Contrary to the previously embraced approach of pre-planned microrayons, housing is now constructed as in-fills in areas considered to be prestigious (Jones Lang LaSalle, 2012). Often, newly constructed housing is marketed in the shell-and-core form, thus allowing relatively low prices with a corresponding low quality of delivery. The lack of prior neighbourhood planning and relatively flexible construction requirements ensures that, for non-premium buyers, access to infrastructural amenities is limited. This neoliberal approach of producing and selling shell-and-core houses of unbundled infrastructural services thus contrasts with the former reality of bundled infrastructural provision in the Soviet microrayons.

### **Access to housing and inequality**

The housing allocation system of the Soviet Union primarily declared, and in general realized, egalitarian access to the infrastructural services of housing. Still, as mentioned earlier, it also showed differentiated access to resources determined by the workplace, *blat*, or necessity (Gentile and Sjöberg, 2010). The inequality was reflected not only by the location of the housing and the state of the neighbourhood but also by the quality of infrastructural amenities that were present in the apartments. Our interlocutors reported on malpractices during the housing construction and allocation process that were expressed in the exploitation of one's workplace or status. To the bulk of the interviewees, the allocation of housing encapsulated a simple but prolonged procedure. Depending on the type of housing they were applying for, the queue would last for several years and the only way out of the situation was either patience, a lucky break, or manipulation.

Skipping the queue was one of the most widespread types of manipulation. The geographic differentiation in terms of housing has been attested to in several studies (e.g. Gentile and Sjöberg, 2006, 2010). These 'intra-urban landscapes of priorities' were formed through a complex interplay between powerful entities and individuals, thus creating pockets of privileged populations. Our informants from the Kentron district in Yerevan, and the Vake and Saburtalo neighbourhoods of Tbilisi, worked in prestigious jobs that ensured better housing in a better location. Getting an apartment in a non-prestigious area, by contrast, did not require housing manipulations.

Indeed, the 'prestigiousness' of a particular neighbourhood was not defined only by the presence of a particular infrastructure or the quality of housing. The *social* composition of the neighbourhood or the apartment was



also a factor. Our interlocutor from Tbilisi, the spouse of an engineer, recalled her disappointment when their household was assigned an apartment in the peripheral Navtlughi neighbourhood, while all other fellow engineers were allocated apartments in the more *central* Saburtalo area:

Once, [at a party at another engineer's home] I complained with my fellow colleagues how I was feeling left out [from the others]. I mentioned that I had an apartment in Navtlughi [the periphery], and then I was promised that they would give me an apartment on Pavlov Street [located in the Saburtalo neighbourhood]...Finally we were assigned an apartment – although it had a lower ceiling, it was [in a better location] on Pavlov Street!

Not only well-connected and privileged residents were concentrated geographically. Large enterprises constructed and allocated apartments to their workers in a spatially concentrated way. Residents often shared the same workplace or job type, at least at the apartment level: 'Our apartment block was constructed [by the Factory after 26 Commissars of Baku]. Two other neighbouring apartments including one up on the hill were also commissioned by the same factory' (Tbilisi, respondent from Didube). Still, even though the Soviet model of social welfare was a 'deficit model' and regulated people's access to housing differently, it generally ensured more or less de-commodified access to social services (Collier and Way, 2004) and housing-related infrastructures. The provision of shelter, regardless of its quality, and relatively uninterrupted connections with hot water, gas, and electricity were mentioned by the respondents as sources of relative stability in their lives.

This overall feeling was contrasted by developments following the dissolution of the Soviet Union when the respective republics found distinctive ways of maintaining or completely replacing the existing modes of welfare provision by simply dismantling the elements of the welfare state and scrapping social expenditures (Pascall and Manning, 2000). Both Armenia and Georgia were strongly advised by international monetary institutions to follow closely the principles outlined in the Washington Consensus by further reducing government spending on social security services (Deacon, 2000), which indirectly contributed to the depletion of urban infrastructure.

### **Housing and infrastructural inequality**

As attested by Gentile and Sjöberg (2006), residential blocks and microrayons commissioned by 'less-prioritized enterprises' were worse equipped with communal infrastructure. This was true for the South Caucasus as well, although problems with infrastructure were especially vivid in the peripheral neighbourhoods. In Tbilisi and Yerevan, after moving to new apartments,

residents often had to conduct basic repairs and maintenance themselves. Memoirs of moving to housing units not supplied with basic infrastructural connections are still striking. The most conspicuous examples come from the informants who moved to newly built bedroom neighbourhoods of Yerevan in the 1970s and 1980s: ‘People would lay cables together, renovate walls (Yerevan, Avan)’; ‘When I moved to this neighbourhood, there were no shops or transportation, [...] only mud and dust...I was so terrified’ (Yerevan, Malatia-Sebastia).

The inequalities were indeed exacerbated by the differentiated access to infrastructure and services, especially after the demise of the Soviet Union. Both cities privatized their energy and water supplies, which are currently owned or operated by large multinational corporations. The financialization of the utility sector, which turned from a service provider into a profit-making business, put an additional burden on the poorest citizens: ‘Today people would not be able to earn as much as they need to afford those [communal] fees’ (Yerevan, Malatia-Sebastia). Water outages and timetables for water supply, as well as electricity blackouts are still present in Yerevan and to a lesser extent in Tbilisi, further exacerbating insecurity and provoking feelings of nostalgia for the Soviet Union: ‘Well, [in Soviet times] if something happened [with gas or electricity, the authorities] would announce it on TV and then come and repair it, if necessary’ (Yerevan, Kentron). Apart from disruptions, unpaid utility fees also mean disconnection from the infrastructural networks, be it electricity, gas, or water: ‘It has happened that I would pay the last money I had [to pay utilities] and stay without money. I have to do it, as you can’t sit without gas, without electricity in winter.’ (Tbilisi, Mukhiani).

Apart from the utilities, the transition also brought the withdrawal of the state from the repair and maintenance sector of housing itself. Almost all informants from both cities stated that at a certain point they had renovated their private apartments themselves. However, they did not mention a single initiative of self-organization aimed at solving communal problems by their own means. The involvement of the municipality is limited to participation in state-initiated programmes of infrastructure repair. Such ignorance regarding the public space on the part of the municipality could be attributed to the overwhelming privatization of the housing stock at the beginning of the 1990s. Although privatization has assigned some obligations for looking after common spaces, as becomes clear from the interviews, the privatization of housing stock did not incentivize either private involvement or self-initiatives of the municipalities for the maintenance of shared spaces. Privatization and individualization have triggered fragmentation instead of local initiatives for cooperative infrastructure management. The national state still remains the principal actor in infrastructure maintenance and development.

So, with regard to the current physical state of neighbourhoods and shared infrastructures, the respondents mention that maintenance activities

are mostly initiated by the national state. The two cities utilize different models of public-private partnership for general maintenance. In Yerevan, special municipal entities ('*Zheks*') are responsible for maintenance, while in Tbilisi it is conducted through the Homeowners' Associations (HOAs) in partnership with the City Hall and district *gamgeobas*<sup>4</sup> (Salukvadze, 2016). However, these entities are not always helpful: the only way of solving the problem is to address the responsible authorities, which could drag the informants into a Kafkaesque bureaucratic trap. Now, the authorities in Yerevan 'are aware of [the issue], they are informed, they know, however, the issue has not been solved yet' (Yerevan, Nor-Nork). Concerning Tbilisi, the respondents are generally satisfied with the work of communal services and the responsiveness of city authorities when it comes to the repair of ageing infrastructure. However, the programmes imply the financial participation of the residents for funding repairs.

## Conclusion

As has been argued, Soviet infrastructure was meant to embody the Marxist political project (Humphrey, 2005; Larkin, 2013). Overall, it created a safety network for most of the population in the manner of an 'authoritarian welfare state' (Collier and Way, 2004). Simultaneously, as we show, housing infrastructure in the Soviet Union also encapsulated the differentiated treatment of certain populations, thus epitomizing inequalities still persistent in post-Soviet society. Apart from materialities, the quality of housing infrastructure was also defined by its *social content* – that is, with the possibility of connecting and living with representatives of similar occupational classes.

On the other hand, McFarlane's (2010) other argument on the persistence and reproduction of inequality through infrastructures is compelling in the context of the South Caucasus. The effects of this infrastructural depletion were overarching, and also exposed hidden inequalities and brought them to the surface. After the dissolution of the Soviet system, those with better access to resources were quick to recover, while the poor, the less connected, and those at the urban fringes, still struggle.

The persistent nature of Soviet urban inequalities was exacerbated by the perils of the Washington Consensus, which became a dreadful experience for the urban poor of Tbilisi and Yerevan. In the subsequent decades after the Soviet Union, Armenia and Georgia enacted far-reaching liberal reforms and reduced social expenses with the blessings of the International Monetary Fund and the World Bank. The total privatization of housing stock, marketization of its provision, and the financialization of the communal sector further exacerbated already existing inequalities that were put in place during Soviet socialism and before.

And finally, as Graham (2010) suggests, the politics of infrastructure dominate urban political life. In the case of contemporary Tbilisi and Yerevan,

the circulation of neoliberal political regimes and rotating election cycles are intimately linked with the appearance of road construction works, as bitterly described by our interlocutor from the ‘peripheral’ Malatia-Sebastia neighbourhood of the Armenian capital: ‘When elections come, the asphalt patches pop up...after all, [the quality of the patches is] normal and they’ll stay there for two or three more years’ (Yerevan, Malatia-Sebastia).

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## Notes

- 1 Alena Ledeneva (1998) gives by far the most comprehensive definition of ‘*blat*’: ‘... the use of personal networks and informal contacts to obtain goods and services in short supply and to find a way around formal procedures’.
- 2 Respectively, in 1934, 1955 and 1970 for Tbilisi (Van Assche et al., 2012), and 1924, 1935, 1951 and 1970 for Yerevan (Mamyán, 2005).
- 3 For example, through cooperative housing or illegal squatting of urban land (Darjania, 2015).
- 4 *Gamgeoba* – a municipal government of administrative districts in Tbilisi, headed by a manager appointed by the mayor.

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