
Urbanism, Power and Cultural Identity: Establishing the Sofia Infrastructures at the End of the XIX Century

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Abstract

This article deals with the problem of transferring a modern technological system into a pre-modern social and physical space. In the case under question the process of creating a socio-technical network coincides with the process of creating major social institutions—state structure, financial system, educational system, market. The adoption of modern socio-cultural models appeared as a process of ‘Westernization’ to some actors and as a ‘civilization’ for others. In both cases, the ‘pure technical’ character of infrastructural systems was contested and technical installations were perceived as a tool for social and political intervention or as a materialized policy. The ability of underground infrastructure systems to influence changes were not overestimated, as far as their presence created a whole new market and connected in a tight network elements that were previously separated or loosely connected.

This article looks into a peculiar historical situation, which is slightly unusual for the classical studies of infrastructure systems—a small town without any special ambitions for even local influence is made capital of a newly founded state. Furthermore, the town is located at the contact zone of two civilizations, three empires (that of the Habsburgs, the Russian and the Ottoman Empires) and is home to several ethnic and religious communities (Bulgarians, Turks, Jews, Muslim-Gypsies). Historically, the town in question has entered the period of the so-called Revival—a period of cultural and economic upsurge of the region, of strengthening relations and contacts with the European countries, of spreading ideas of national self-determination, a furtive touch of the capitalist means of production, and last but not least—organizing the way of life in accordance with a new type of rationality. To be more specific: the newly founded

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state is the Principality of Bulgaria, which has just broken away from the territory of the Ottoman Empire, and the town is Sofia, nominated capital mainly because of its central location in the middle of the ethnic Bulgarian lands; and this article will dwell on the issue of how the transfer of modern underground infrastructures turned into a problem for the political values and social order.

Although the direct references are very limited, the whole article is guided by the theoretical framework and premises of actor-network theory (see Callon 1987; Latour 1987; Latour 1996) and the methodology of historical sociology.

Sofia

When it became capital of the Principality of Bulgaria, Sofia was not the biggest or most important town within the Bulgarian territory by far: its population slightly exceeded 11,000 according to the census of 1879, the urban landscape, despite some modest improvements of the roads during the time of Mithad Pasha, resembled that of a 'large, dirty, muddy village', with one-storey tumble-down, rickety houses, winding narrow streets and malodorous puddles in the streets. The first signs of rational urban planning appeared as long ago as the time of the Temporary Russian Government. They were brought about by the practical needs which the presence of the military units imposed rather than by the intention to implant European practices or organization (which otherwise had more than instrumental significance in the consciousness of the Bulgarians) into the 'flesh' of the town. Thus the status of Sofia as capital of the nation state, which was to develop as a European Christian monarchy, gave rise to a whole new layer of problems which well-considered urban planning and development was designed to solve: areas had to be planned in a rational way, residential, production and public areas had to be allotted and zoned. During Ottoman rule, the separate religious or ethnic communities had the right to self-government within certain limits and were jointly responsible to the authorities (Mutafchieva 1993). This, in its turn, meant that they did not have equal rights (Ottoman legislation was based on the Sharia) and resolutions concerning the presence of one community

only were often passed. After the Liberation (1878), however, the purposeful efforts towards functional mutual integration of the town did not allow for these problems to be solved in fragments, since the urban culture of the modern state was built on the principles of universalism and universal equality. On the other hand, the challenges which the constantly growing capital posed to the municipal authorities could not be solved within the framework of the inherited revival traditions of self-government only. Once the status of Sofia changed, the economic attractiveness of the town grew rapidly and in time led to a significant surge in population growth. This raised a series of issues connected with the hygienic conditions of the urban living environment, the proper distribution of the meagre resources of space and water, with facilitating the traffic of people, goods and capital, etc. An adequate solution to these problems could no longer be found within the framework of the traditions of government inherited from the times of Ottoman rule—not only because the chosen model of development (the European one) was considerably different from them, but also because they were simply not adequate for solving such crises effectively (see Foucault 1997). Put in the unusual situation of having to build an entire administrative structure at all levels out of nothing, the actors involved inevitably turned to urban planning and development policy as a purposeful activity for imposing firm boundaries to the at times chaotic urban development. Urban planning soon adopted the way of thinking and the analytical methods of civil engineers specialized in public infrastructures who had gained the respect of the public as early as the 17th and the 18th centuries; however, the profession of town-planning architect did not finally assert itself until the mid 20th century (Hall 1997, 322). Nevertheless, in the process of optimizing, rationalizing and homogenizing the urban territory of Sofia, modern infrastructure systems and their developers were called upon to play the key part.

Water supply

Once Sofia became the capital of the state, the problem of providing water for the constantly growing population turned into a really pressing one. The Liberation found Sofia with 54 fountains, fed by various springs

near the town. Most of the water, including that from wells in the homes, was used for domestic animals and for watering the numerous garden crops,¹ and people took care of their personal hygiene in the public baths. Three plumbers maintained the fountains and during the time of the Revival, they were paid from the revenues of the Waqf properties,² specially designated for that purpose. The water pipes at that time were earthenware or wooden and broke often and easily. The only tools the plumbers had were sacks which they used both for plugging up holes and for diverting the flow from one fountain to another. The pipes often silted up but were cleaned only when there was so much silt that no water could get through (Shamardzhiev 1906).

The network of modern piping infrastructures is successful in towns with large population density, heterogeneity and size or—briefly—in industrial towns. The market success of infrastructure systems is difficult to achieve and ensure if plumbing and drainage, turned into a paid service, have no large-scale industrial or numerous individual consumers. The lack of industrial enterprises in Sofia had a serious impact in two aspects: on the one hand, it deprived the water-piping system of a strong market ally which could ensure the initial start of the utility, and on the other hand, it predetermined the vital role of the Municipality in the transfer of the social-technical network (in the meaning of defining roles, 'transfers', procedures).

When in the 1880s the new water main was finally completed and put into use, the Municipal Council in Sofia funded the installation of public taps with pneumatic pumps in most neighbourhoods and some crossroads. Unlike the scattered free fountains of Ottoman times, the new ones were fed by centralized water mains constructed, however, in accordance with economic logic. Yet, the water provided by the mains had to be paid for only when the tap was in the user's home or garden; public taps in the neighbourhood remained free of charge. Soon after they were installed, however, they proved to be extremely inadequate for the growing needs of the constantly expanding town (especially in summer when the reduced flow of water exacerbated the existing shortage): '(...) to get water from such a fountain in the first place required strong elbows and shoulders, because in order to get to the tap you had to elbow your way through the crowd, and then it took quite an effort to pump out the

water. People jostled, shouted and swore and often resorted to brute force. As a result, pieces of pitchers and earthenware jugs could be seen around the water pump, as well as, very often, blood from injured heads' (Kostentseva 1979, 15). It turned out, however, that despite the seemingly vital need for the new product, domestic piping, its spread among the population was a slow process: the piping market remained small for a long period of time—by the end of 1907 the water supply network covered 71% of the streets of the town with only 27% of the buildings connected to it (Georgiev 1983, 37).

Water pumps

The attempt for a new way of using water and an already familiar (or deemed familiar) technology to be introduced apparently brought about a series of crises, connected both with the establishment of its proper use and with the development of an entirely new market for this technology. This, in turn presupposed a certain level of preliminary disciplining, homogenizing and normalizing of the actors involved. The very use of the new water pumps had to be subject to regulation because the investment and running costs were entirely covered from the municipal budget and the inappropriate use of the pumps resulted in extra costs for repairs and replacement of the equipment.³ By turning water into a state-owned property (as a result of the nationalization of the natural resources) and the very utility— 'water supply'—into a paid product, the pumps left the real economy of 'symbolic' goods, based on exchange of gifts and symbolic gestures (Bourdieu 1997; Toraman et al. 2004) to enter a new one, based on 'real' goods. In Ottoman culture, water had always been deemed an invaluable gift from God for all living creatures. Because of this, it was gathered and stored: gravestones had grooves to collect rain-water for birds to drink; vessels full of water were put out in the streets for the dogs; where there was a spring or a brook, the Turks built a fountain, usually with a marble block on which quotations from the Koran were engraved (Lewis 1971). On the Bulgarian lands, Turkish fountains were necessarily built in mosques, often at crossroads and in the yards of inns and camps; water was freely and constantly flowing from them and special

funds from the Waqf complexes were allocated for their maintenance. In folklore the building of a fountain was considered a highly noble deed, a generous gift to anyone who passed by. Water itself was not just a natural resource or a means to quench your thirst—it was laden with symbolic meaning and socializing rituals. Just like the Western European fountains (Lipp 2002), the Bulgarian ones played the role of an important community centre—it was a place where women discussed news, gossip and new ideas, where pre-arranged meetings between young people with a view to marriage took place, and with whose invisible mediation social changes were smoothly introduced into the everyday life of the household. The fountain or water pump was a public place where the emerging social stratification was displayed, in which the mixture of life-styles led to the emergence of the hybrid styles of consumption, where ‘the Captain’s wife, wearing clogs, took water in the can to finish her washing, this same Captain’s wife would dress up in an evening dress to attend the big ball at the Military Club’ (Kanazirski-Verin 1996). When the economic and political elite of Sofia was consolidated, the wealthy ladies disappeared from the crowds queuing for water: home water pumps or the servants facilitated water consumption of the family, but also separated and isolated the women from an environment which was now considered unwanted, inappropriate and non-prestigious. Thus home water supply systems as a commodity became a subject of prestigious consumption as long as it was affordable mostly to the wealthy strata of the community of Sofia. Only high-ranking government and municipal employees and the bigger private entrepreneurs could afford to pay for the installation of piping itself, and to lead a life-style which excluded the meeting of their needs by means of domestic farms. However being a social norm and a sign of being a ‘good’ member of society, the practices and elements of this life-style were widely copied. Although having a water installation in the home was not affordable for the majority of the Sofia population, with the passage of time a lot of water-oriented activities (bathing, swimming in a public pool, access to tap water) became a distinct feature of urban life. Newcomers were often recognized by the manner of their interaction with city infrastructure and were objects of jokes and anecdotes; so before being allowed to participate fully in public city life, they usually received

additional social training from their kin or friends in the distant quarters (Kanazirski-Verin 1996).

This stratum, however, remained quite thin, and until 1912 most households continued their semi-country way of life, in part connected with income from the market and in part with home-produced goods which were of vital importance for the livelihood of the family (Georgiev 1983). The greatest part of the water consumed by such households was used for watering the garden and the domestic animals, for washing-up, washing and bathing. For such households it was not reasonable from an economic point of view to use paid water supply piping, even though the consumption of water was paid on an annual subscription basis, not based on the volume of consumed water. The socio-economic profile of the population of the capital was determined by small producers and owners who, at the turn of the 20th century, continued to comprise the majority of the population of the capital city. The income level in the town changed in accordance with the financial tempo of development and the level of the salaries of civil servants—household goods, bought on tick, accounted for the greatest part of the commodity turnover, and when pay-day came the settling of accounts distributed the cash flows into the pockets of the numerous ‘petty existences’ working for the civil servants.⁴ The infrastructural systems appeared to be an appropriate instrument for controlling and disciplining the newcomers gravitating to the developing city and their transformation to co-subjects of the sanitary norm, since due to their structures they delineated separate, previously independent nuclei and created a unified space. When this space also took on a commodity character the infrastructures of these practices became a powerful instrument for the creation of market relations and along with this—an innovating mechanism.

Drainage

During Ottoman rule, there was no system of sewers—refuse and animal faeces were either collected in refuse pits or transported to the fields for manure. The cleaning of the outdoor lavatories was a private matter—there were special people who emptied and cleaned the refuse pits every

2 or 3 years and the charge for this service was orally negotiated between them and the owner of the house. How come that this peculiar activity acquired public relevance and the Municipal Council interfered in its regulation? This was far from being a natural process—the stink from the outdoor lavatories did not bother the residents of Sofia at that time; they had grown used to it. Public management of lavatories appeared with the Russian Temporary Government—officers of the Czar's Army were appointed city sanitary inspectors and so their activity crossed the borders of the barracks and spread among the civilian population. The centres of medical knowledge were the places from which the medical discourse expanded and took over Sofia, resulting in excrements beginning to be considered unhealthy, inappropriate and ugly. Being some of the most active municipal servants, sanitary inspectors took an active part in arousing public interest in the sanitary control of the town and in mobilizing all the municipal resources for that purpose.

Although discussed for a long time, the issue of building a modern system of sewers actually appeared on the agenda of the Municipal Council after several floods. In 1882, an international competition for developing the initial plans of the Sofia system of sewers was organized and the winner was a project titled 'Steingut'. Pursuant to this project, the so-called mixed system of sewers (*tout-a-l'égout*) was adopted and eventually implemented, which provided for refuse and rainwater to be carried away along the same network of sewers, and the wastewater, diluted 6–8 times by rainwater, was to be discharged in suitable places into the nearby Vladaia and Perlovska Rivers. This system proved to be suitable for the hilly terrain of the town, and was also cheaper and more convenient for operation.⁵ The sewers were intended to drain the marshy town areas and to prevent waste products from the slaughterhouse and leather workshops from being dumped into the two rivers in the town any longer, and thus to prevent the contamination of underground waters which were still used by the population through the numerous wells in the town.

The system of sewers is built as an 'all-in-one' system and is designed both to drain the streets and the built-up areas, and to channel the water back to the fields; no charges were collected for the drainage system except from the big polluters who, in the process of producing certain

goods dumped many other by-products as well. This infrastructure system encountered the same problems involved in its establishment as a socio-technical network as the water pipes did—slow spread among the population, incorrect use due to the mixing and overlapping of technological meanings (the pipes, which were made of baked clay often silted up and burst because of the rags and bulky organic pieces thrown into them)⁶ and, in the opinion of the users, unjustified advantage over the traditional methods of dumping refuse.⁷ In 1907, only 1881 buildings (16%) in Sofia were connected to the system of sewers, even though the WC was a widely discussed acquisition—not least because of the fact that being equipped with taps and not with siphons, they posed a risk of water contamination (Georgiev 1983).

A public tender was organized for the construction of the drainage system in 1883, which was won, in the third round, by the company of Georgi Mimidi, 'Mimidi and Co.'. However, the entrepreneur did not commence work for a period of three years, but the Municipal Council could not prosecute him due to omissions in the contract. In these three years a number of municipal and state commissions investigated the problem, issued reports with different conclusions and recommendations and all involved actors tried to produce their point of view as the truth by publishing exposing documents. Finally, it became clear that the drainage system in Sofia was not exactly a transfer of technology, but rather a new product: the original plan turned out to be only a general project, indicating the preferred type of system, but not an effective plan. A key part of the socio-technical network was missing—the executioner was unable to start the works due to lack of detailed technical schemas and blueprints, the municipal officials did not know that they needed such (the main plan 'Steingut' was sufficient for them as directions for working), and the engineer who had designed the project remained suspiciously silent.⁸ Meanwhile Mimidi managed to build his own earthenware factory, and when the Municipal Council organized another tender, Mimidi was again entrusted with project implementation, because the original contract was still valid. The construction of the drainage system took over five years, accompanied by constant complaints on the part of the entrepreneur that the council delayed the payments due, and on the part of the council that the entrepreneur

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failed to meet most deadlines, that he did not meet the standards for the construction materials, for construction and for financial insurance of the contract, etc. In the meantime, the members of the Municipal Council had already acquired institutional experience and at the turn of the 20th century divided the work on city infrastructures between different executives. This allowed them to create a competitive environment in the sphere of underground infrastructure development and thus make way for the introduction of new construction materials and technologies.

In comparison to the total number of buildings, the modest share of home water pipes and drainage systems was the cause of permanent annoyance on the part of engineers and municipal councillors. Even though it was often pointed out that the water mains had not been constructed in accordance with purely economic logic and access to water could not be restricted, the requirement for profitability of the investment that had been pushed aside constantly recurred in the rhetoric of the administrative authorities. The public economic nature of the water mains turned water into a public good, and by definition, it could not be expropriated or privatized. On the one hand, the use of public goods could not be limited only to the people who had financed their production ('free-rider problem'), and on the other hand, the population obtained water mainly from the public pumps—this dual nature of the commodity gave rise to unexpected tension.

The turning of the water from the water mains into a profitable product (and the accompanying neutralization of the symbolic meaning of water), however, called for additional efforts for the actual creation and expansion of a new market: if the population was unwilling to have water pipes at home, they had to be forced to accept them. The idea for ensuring the success of the water mains through administrative pressure or manipulative measures recurred year after year with various municipal governments and technical services, and mainly gravitated to the proposal for the reduction of the number of public water pumps, or even for leaving only those located in the poor parts of the town. The hidden aim was the following: when pressure brought no results, wealthy citizens would be forced to be connected to the water mains if there were no longer any public water pumps near their homes (Geshov 1900, 87). Since the specific range of attitudes ensuring the viability of the modern infrastructure was

missing, it had to be created by force, through purposeful power impulses. Modernization tension at the level of the whole administration, not only at that of the government, posed extreme tasks for the government authorities of the capital city.⁹

Independence of the engineering field

The implementation of underground piping was a difficult business given the administrative and building practices in Sofia, which were a hybrid complex of local construction traditions, modern technological structures and Western political organisation engrafted on traditional Bulgarian institutions (Slavova 2003). The most important factor however was probably the instability of the technical positions. In 1897 the new Public Utilities Law was published, which entitled the architectural department at the Ministry to control the public buildings as well as to supervise the construction process throughout the entire country. This all involved a huge amount of work whose efficient accomplishment needed a large reserve of trained specialists. At the same time, the state architectural staff was reduced,¹⁰ and only the chief architect, architect-inspector, architect-constructor and architect-controller's positions remained unchanged. Only one single architect with all these duties¹¹ was provided for each of the six technical sections in the country (Plovdiv, Burgas, Varna, Russe, Vidin, Turnovo).

Having in mind this dynamic field, it is not surprising that the collaboration between all kinds of actors (human and non-human), the translations and the stable interaction frames were relatively hard to maintain (see Latour 1993). The autonomy of the scientific field and the objectivity of the scientific report were permanently under pressure. In the municipality administrative sector there was a high fluctuation of technical staff: personnel was often replaced because of the political situation (especially with the rhythm of local elections) (Slavova 2003)—against the background of an underdeveloped domestic market with a huge self-sufficient agricultural sector, with shrinking foodstuff exports to the Ottoman market and the virtual absence of export trade with Western Europe and the Balkan States, the state was the major economic

agent in the field. The state infrastructural projects were the main field of activity for the technical profession and the salaries in state and municipal bodies were usually higher than in the private companies. So the state funds were the main source of wealth and when a new political party achieved victory, its functionaries were quick to replace the personnel even in the most modest positions. The relations between leaders and their sympathizers were not based on ideological proximity but rather on kinship or client-patron bonds.

The negative dynamics in the engineering field was further stimulated by the state practice of moving technical personnel around the country for national infrastructure projects. These decisions often were not based on technical or economic rationality but used the positions in distant places as a reward or punishment; the engineers themselves, after working in the municipality for a year or two, often found their way into the private sector. Neglecting the specific internal rationality of the engineering problems and the authoritarian interference in the professional practice allowed serious drops to appear in the barely formed techno-economic network.¹² The opinion of the engineers was taken into consideration not as an expert valuation, which could help in taking adequate management decisions, but as a resource in the actors' struggle,¹³ who used the municipality structures for pursuing non-public (private) aims.¹⁴

The professions

The development of the germ theory of disease during the second half of the 19th century made the social borders between certain areas and quarters in the cities quite virtual. The workers invading the city of Sofia and accounting for a substantial part of the annual mechanical growth in population spread out everywhere, and as was stated in a brochure, were also able to spread diseases everywhere. As satisfaction of the country's need for doctors and hospitals was a slow process, most of the regional administrations in the country, including that in the capital city, were compelled to put emphasis on prevention instead of on medical treatment—in the municipal health care service many more vacancies were provided for sanitary personnel and hospital attendants than for doctors.¹⁵ Until 1898, there were no regulations

for the activity of the sanitary service in Sofia, and the orders and prohibitions with which the sanitary agency flooded the population of Sofia were met with perplexity and very often with indignation.

These problems were only a part of the integral process of institutionalizing medical knowledge in the competitive struggles of the different specialist fields. The difficult process of professionalization in Bulgaria was not unique—the separating and the formal-rational standardizing of health knowledge as a separate field, the access to which is officially determined, was first accomplished in the Western European countries, and at the beginning, the role of the state in it was quite insignificant (Macdonald 1995). The key period for state interference in determining the doctor's profession was during the 19th century, when the importance of the professional report had been clearly intensified. At the same time several professional circles—doctors, engineers, lawyers—started to gain wider public influence and as a consequence a more serious presence in the public institutions; they led the struggles for those professional aims producing an ideological image of their own as gratuitous officers of the knowledge headway and public welfare (Siegrist 1990). Although the engineers in Bulgaria faced serious hardship on imposing the scientific reports, the doctors' class was more numerous and had gained stable positions even before the formation of the state of Bulgaria.

The mechanisms of biopolitics (see Foucault 1992) concerned not only medical practice, but also interfered with the modern organization of space and the establishment of infrastructures. The physicians in the Principality regarded themselves not only as people who took care of the health of *individuals* but also as state officials taking part in the nation-building process along with lawyers, engineers and teachers. They were a personification of the sovereign state authority over the citizens, not merely 'sellers' of health services who had private interrelations with their clients. The doctors had to look after the health of the *population*, the sanitary condition of work places, public places and the populated areas as a whole (taking into consideration the location, the climate and the resources). Their sphere of influence appeared to be almost unlimited—they were asked to give their opinion on engineering, town-planning and industrial problems, to issue prohibitions, ordinances, to pass laws and

regulations. In this way the doctors' practices in Sofia at the beginning of the 20th century were not merely penetrating, changing and productive, but also a test for to what extent the interaction of certain relations (in the centres for medical knowledge in Western Europe) could be seen as universal (universally put into practice and reproductive) or at least as the more perfect invariant of an own Bulgarian culture (perceived and emphatically articulated as Christian / European / Slavonic).

'Self-colonizing culture'

The resistance against the new principles of structuring of the social relations, which more or less reflected all spheres of life, also had influence on the approbation accorded to professional knowledge. In the first year of the Bulgarian state attitudes were formed such as frank mistrust of the foreigners who had been invited to work in Bulgarian institutions because of a lack of local specialists. As the incoming engineers, architects, doctors and teachers remained very few and were mainly based in Sofia, their activities and presence was commented thoroughly. The most fierce expressions were against foreigners who were appointed as officers and counsellors in the ministries to the extent that the call was made for 'all the foreigners, excluding several honourable Russians, to be ordered out; there is no need for specialists' (Irechek 1995, 289). In 1883 a law was passed that went so far as to state that foreigners could conclude agreements with Bulgaria once every three years.

Part of this spirit was due to the natural phenomenon in all newly opening cultures of a fear of penetration from the outside world in that which is 'ours', a fear 'that some Murkvichkas, Ruzhichkas and so on, who had been soldiers and dullards in the German lands, today teach the most important school subjects in our Bulgarian schools, teach our children to servility and admiration' (Semov 2000, 98). The persistent attempts to discuss the Bulgarian experience after the Liberation as part of the integral culture of the Christian European peoples at the same time constructed and deconstructed strong ideologies that became a constant element of national perception during the next decades. They simultaneously constructed their own radical positive image of the Bulgarian (even when presented as a

historical victim) that could be summarized in the category ‘we have also given something to the world’;¹⁶ and deconstructed as a ‘misunderstood civilization’¹⁷ the images of pure Western ideal and homogeneous civilization, created in the virtual public space during the period of National Revival. These reactions towards foreign citizens, products, institutions, life-styles and sometimes ideas were not simply a reaction to the suddenly opened doors of the culture—they were also conscious resistance against already well-established Western discourses about the Balkans, Eastern Europe or the Orient. As a number of studies have shown (Said 1999; Todorova 1997; Wolff 1994) these discourses shaped and imposed identities, relations and hierarchies to the non-European world and had turned into practical geopolitics. The self-colonizing attitude of Bulgarian Revival (Kiosev 1999) was based in a great part upon the dramatic and painful sense of national insufficiency, inadequacy and inferiority in comparison with the Western societies. The production of these ideas was in a way a reaction to the inability of dominant discourses to think hybrid cases; however—as some centuries of Ottoman history demonstrate—the establishing of such a hierarchy and embedding these injurious ideas of one’s own society and culture as a constitutive part of self-perception was not the only possible reaction. After the formation of the Bulgarian state (1878), the practical validity of this ideological complex had to resist the rivalry of alternative discourses that emphasize the evaluation of the national inheritance as ‘authentic’ and ‘real’. We might make the assumption that sanitary problems only strengthened the idea of the perfection of the Occident as a source of ideas and standards ‘unsoiled’ by foreign influence (especially Muslim and oriental). In the Bulgarian sanitary discourse Europe was constructed as (perfectly) clear and the widespread opinion produced condensed formulae like:

‘In the European manner: *Organization + feeling + sense = sanitary welfare*. In Bulgaria, as well as in Sofia: *Organization + gendarme + superstition = unsafe sanitary welfare*.’¹⁸

Although the idea of specific historical constitution of the above mentioned ‘feeling’ of cleanliness in Western societies (and the fact that it was not natural or immanent attribute to the mind or the body of Westerners) was not completely unknown to the Bulgarian doctors, some-

times they omitted it intentionally in order to spur on the sanitation of living spaces and modernization of everyday practices. In their ideological rhetoric, the sanitary norms were not just a way to a healthy environment or tool of social engineering; on a different level they were a cultural norm, a political order and a set of social relations that were deemed to be the instrument of achieving complete, uninjured, deserving respect identity as valuable citizens and persons. In this sense, the building of underground infrastructures of the capital city was not exactly a utilitarian product of the altruistic technical mind, created to solve the problems of capitalist development but also a tool with multiple applications—political, social, cultural, ideological, economic. The centralized systems of sewage and waterworks contributed to a new perception of urban community as an integrated entity in which the individual citizen can see his or her bond with others being mediated by a properly designed space or a huge physical structure that is practically accessible for everyday activities. This was in radical contrast with the segregated communities of Ottoman Sofia, that had been closed in their local routes, traditional way of life and production and strictly regulated interactions.

Notes

- ¹ For the average household it was usual to keep at least one cow, 20–30 hens, 1–2 pigs, sometimes rabbits. The owners of dairies often had their own herds of buffalo cows, sheep, etc., which were taken out to graze on the common pastures near today's National Assembly; each neighbourhood had its own herdsman (Georgiev 1983, 44).
- ² Waqf—philanthropic foundation, established to support services to mankind in the name of Allah. It possesses non-perishable property whose benefit can be extracted without consuming the property itself. Therefore Waqf widely relates to land and buildings. However, there are specific Waqf of books, agricultural machinery, and cattle, shares and stocks and cash money (see Toraman et al. 2004).
- ³ The correct technological use of the new water pumps was regulated by several ordinances of the Mayor, which regulated the admissible use of water: it had to be used for domestic purposes only, and only in the homes. The result was an avalanche of fines for the residents who, for years on end, did not understand and observe those rules (Sofia Municipal Newspaper 1891, 5–8).

- ⁴ In spite of the constant increase in the number of civil servants and free-lance specialists, there were 238 artisans' workshops and only 3 factories in Sofia in 1878; by 1905 they had slowly grown to 34 (Yubileina kniga na Sofia, 1928).
- ⁵ CSA, f.1k, inv.3, a.e.1401.
- ⁶ The interpretative flexibility (Pinch & Bijker 1987) of the drainage system was not as big as that of the water mains, but in the course of 1900 alone several reports from the Director of the Drainage Department, Hristo Tanev, were filed at the Municipal Council. They were all similar in content: 'Refuse of various kinds is thrown into the street drains at many places by inn kitchens, shops and grocer's shops, ashes from stoves, faeces from night pots, in short—people use them as refuse pits in which they can dump anything' (CSA, f.1k, inv.3, a.e.1386).
- ⁷ The Municipal Council set up its own Waste Management Department in 1912. Until then this activity was consigned to entrepreneurs pursuant to public tenders or mutual agreements.
- ⁸ His name was Mihail Momchilov, and from the very beginning of the project his participation was questionable. He was involved as a translator of the technical commission evaluating the competing projects and refused to withdraw his own project from the competition even when exposed. In this he had the support of the mayor, Dimitur Petkov, and they both were accused by the press of secret machinations. (Sofia Municipal Newspaper, 1892, issue 12–13, 1–5)
- ⁹ 'Money is needed to develop the capital city and to meet its needs, and everyone knows that the usual revenues of the city are by far not enough to meet these needs', explained Dimitur Petkov, the most successful mayor of Sofia in that period, on 5 June 1889. 'We have to provide water for the city, surface the streets and also consider the building of baths, the drainage system, street lighting, etc. Yet, we have no funds (...)' (Miteva 2002, 106–120).
- ¹⁰ This happened in 1902. The impossibility for effectively controlling the money flows and state expenditures (see Avramov 1999) led to a persistent demand for 'saving' or 'practicing economy' (*BIAD Journal* (5) 1902, 85).
- ¹¹ *BIAD Journal*, (5) 1902, 85.
- ¹² The following words are attributed to the famous mayor of Sofia, Dimitur Petkov: 'I do not care a sixpence about engineers. The line direction will be determined by politicians and the engineers will simply implement it where instructed' (Kazasov 1969, 97–98). For some aspects of the objective inevitability of authoritarian government in the early stage of modernization, see Dimitrov (1997).
- ¹³ These struggles are not only political (see Slavova 2003), but also, to a larger extent, they are struggles for control over resources and positions that control

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and distribute positions, while also forming the mechanisms for controlling and distributing.

- 14 '(...) the decisions of the Municipal Councils on technical issues, could naturally not be objective. Nevertheless the efforts made, the personal sympathy and antipathy play an important role in the taking of these decisions, although always veiled with the common welfare' (Geshov 1900).
- 15 In 1899, the medical staff of the municipal health care service included 6 physicians (until 1898 there were only two), 3 veterinaries (until 1893 – none), 1 town chemist (only vacancy without person appointed for the position), 3 maternity nurses, 2 vaccine nurses, 5 sanitary superintendents, 6 medical auxiliaries for disinfections, 1 medical auxiliary supervising the public houses, 1 veterinary auxiliary for slaughterhouses, 3 workers on the disinfecting machine, 6 disinfection workers, 5 sanitary supervisors. Altogether: 41 people for a population of 61,000 (Orahovatz 1899).
- 16 This is an extract from a very popular poem by Ivan Vazov, considered as 'the patriarch of the Bulgarian literature'.
- 17 'The misunderstood civilization' is a title of a popular play of the period.
- 18 Mihailov (1909, 14; the italics in the original book).

References

- Avramov, Rumen (1999), 'Stopanskiyat 20 vek na Bulgaria' ('The economic 20th century of Bulgaria'), in *Bulgaria 20 vek lalmanac*, Sofia: Trud.
- Bourdieu, Pierre (1997), *Prakticheskiyat uset* ('The Practical Sense'), Sofia: Kritika I humanizum.
- Callon, Michel (1987), 'Society in the making: The study of technology as a tool for sociological analysis', in Bijker, W., T. Hughes, and T. Pinch (Eds.), *The Social Construction of Technological Systems*, Cambridge, MA: MIT Press.
- Dimitrov, Georgi (1997), *Bulgaria v orbitite na modernizaciata* ('Bulgaria in the Circles of Modernization'), Sofia: Sofia University Publishing House 'Sv. Kliment Ohridski'.
- Foucault, Michel (1992), *Genealogia na modernostta* ('Genealogy of Modernity'), Sofia: Sofia University Publishing House 'Sv. Kliment Ohridski'.
- Foucault, Michel (1997), 'Upravlyaemostta' ('Governmentality'), in *Vlast* ('Power'), Sofia: Kritika I Humanizum.
- Georgiev, Georgi (1983), *Sofia i sofiyantsi* ('Sofia and the Sofians'), Sofia: Nauka i izkustvo.

- Geshov, Stoyan. (1900), 'Vodosnabzhdenieto na Sofiya' ('The water-supply system of Sofia'), *BIAD Journal* (4): 61–70.
- Hall, Peter (1997), *Cities of Tomorrow. An Intellectual History of Urban Planning and Design in the Twentieth Century*, Oxford, UK: Blackwell.
- Hughes, Thomas (1983), *Networks of Power: Electric Supply Systems in the US, England and Germany, 1880-1930*, Baltimore, MD: Johns Hopkins University Press.
- Irechek, Konstantin (1995), *Bylgarski dnevnik 1879–1884* ('Bulgaria Diary 1879–1884', chapter 2), Sofia: Academy Publishing House 'Prof. Marin Drinov'.
- Kanazirski-Verin, Georgi (1996), *Sofia predi 100 godini*, ('Sofia 100 Years Ago'), Sofia: Vesela Lyutskanova Publishing House.
- Kazasov, Dimo (1959), *Ulitsi, bora, subitvia* ('Streets, People, Events'), Sofia: Otechestven front.
- Kiosev, Alexander (1999), 'Belejki za samokolonizirashtite se kulturi' ('Notes on self-colonizing cultures'), in *Sofia University Yearbook*, Center of Cultural Research 87 [for 1994].
- Kostentseva, Raina (1979), *Moyat roden grad Sofia* ('My Birth City Sofia'), Sofia: Otechestven front.
- Latour, Bruno (1987), *Science in Action. How to Follow Scientists Through Society*, Cambridge, MA: Harvard University Press.
- Latour, Bruno (1993), *We Have Never Been Modern*, Cambridge, MA: Harvard University Press.
- Latour, Bruno (1996), *Aramis, or the Love of Technology*, Cambridge, MA: Harvard University Press.
- Lewis, Rafaela (1971), *Everyday Life in Ottoman Empire*, London: B.T. Batsford.
- Lipp, Karl (2002), 'Cheshmata' ('The fountain'), in *Mesta na vsekidnevieto* ('Places of Everyday Life'), Sofia: LIK.
- Macdonald, Katherine (1995), *The Sociology of the Professions*, London: Sage.
- Mihailov, Ivan (1909), *Nastoyashtoto vodosnabdyavane na stolitsata Sofia* ('The Present Water-Supply of the Capital Sofia'), Sofia: P. Bezaitov Printing Press.
- Miteva, Zhanet (2002), 'Gradut i negovite znaci' ('The city and its signs'), in *Demokratichen pregled* 50: 106–120.
- Mutafchieva, Vera (1993), *Osmanska sotsialno-ikonomicheska istoriya* ('Ottoman Social-Economic history'), Sofia: BAN.
- Orahovats, Peter (1899), 'Sanitary organization and sanitary conditions in the city of Sofia', report presented at the Meeting of City Council of Sofia on 13 February 1899, Sofia: 'St. Sofia' Publishing Press.

270 *Svetlana Paunova*

Said, Edward (1999), *Orientalizmyt* ('Orientalism'), Sofia: Kralitsa Mab.

Semov, Marko (2000), *Minalo kato v roman* ('Past Like in a Novel'), Sofia: Producerska kushta 'Edita'.

Shamardzhiev, Hristo (1906), 'Vodosnabdyavaneto na grad Sofia' ('Water-Supply of Sofia'), in *BIAD Journal* (1–2).

Siegrist, H. (1990), 'Professionalization as a process: Patterns, progression and discontinuity', in Barrage, M. (Ed.), *Professions in Theory and History*, London: Sage.

Slavova, Petya (2003), 'Metamorfozi na stroitelniya process v sledosvobozhdenska Sofia (1878–1912)' ('Metamorphoses of building practice in Sofia after liberation'), in *Sotsiologicheski problemi* (3–4).

Todorova, Maria. (1997), *Imaging the Balkans*, Oxford, UK: Oxford University Press.

Toraman, Cengiz et al. (2004), 'Cash Awqaf in the Ottomans as philanthropic foundations and their accounting practices', <http://www.commerce.usask.ca/special/5ahic/papers/5AHIC-37%20FINAL%20Paper.pdf>

Voinikov, Dobri (1993), *Krivorazbranata civilizatsiya* ('Misunderstood Civilization'), Veliko Turnovo: Slovo.

Wirth, Louis (2002), 'Urbanizmut kato nachin na zhivot' ('Urbanism as a way of life'), in *Gradut – socialna realnost i predstava. Antologia* ('The City—Social Imagery and Reality'), Sofia: Sofia University Publishing House 'Sv. Kliment Ohridski'.

'Yubileina kniga na Sofia' (1928) ('Anniversary book of Sofia'). Sofia: National printing house.

Additional sources

- BIAD Journal (Journal of Bulgarian Architecture-Engineering Society) 1889–1906.
- Central State Archive of Bulgaria, found 1k.
- Sofia Municipal Newspaper 1889–1894.