Configuring Identities Through Industrial Architecture and Urban Planning:

Greek Tobacco Warehouses in Late Nineteenth and Early Twentieth Century

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In the late nineteenth century the city of Kavala, a town by the sea in northern Greece, was developed to one of the most important tobacco processing centers in the Balkan area. Powerful tobacco merchants mainly from the Hapsburg and Ottoman empires built a considerable number of tobacco warehouses thus redefining the center of the city, its character, as well as its borders. I argue that the architecture of those warehouses deeply configured the identities of tobacco workers and provided the means to tobacco merchants to publicly present themselves and their achievements. At the same time those early industrial buildings subverted the boundaries between the city and the factory, shedding light on the work culture and every day lives of Greece's tobacco workers.

Keywords: tobacco warehouses, architecture and technology, technology studies, industrial design, gender

During the early 20th century the economies of a number of Greek citiesmost notably Kavala, Xanthi, Drama, Volos, Thessaloniki and Agrinio-relied almost exclusively on the growing, processing, and sale of tobacco leaves. Especially in coastal cities such as Kavala everyday life slavishly mirrored the tobacco production cycle—picking, drying, processing and baling the tobacco, then transporting it to the port, loading it onto the barges lined up at the quays in front of the city's enormous tobacco warehouses, and ferrying them out to the foreign companies' steamers anchored out to sea. The kapnomagazathe familiar, usually two-storey stone and timber tobacco warehouses—were important city landmarks. These early types of factories, testaments to the close bond between tobacco and the cities where it was processed, shed light on every aspect of this complex relationship.

In Kavala a considerable number of those tobacco warehouses were built by powerful merchants mainly from Hapsburg and Ottoman empires in the late nineteenth and early twentieth century for both storing and processing of tobacco. These factory buildings took into account the actual work process, arrangements for shipping and receiving, and requirements for natural light where work was done or complete darkness in tobacco storage areas. The architectural plans reveal the everyday work habits, the gender-based division of labor, and even the hierarchical power structures that linked the tobacco merchants to the tobacco workers.

In what follows I focus on the tobacco warehouses as sites of multiple kinds of production-economic, discursive, and cultural-and as subversive of the boundaries between the factory and the city. Inside the warehouses took place the actual processing and packaging of tobacco leaves, the production of unionists and ideological conflicts, the discursive formation of communist fabrication politics, the of new technologies as well as the construction of a gendered work culture. Eventually, the warehouses were the sites where the transformation of people's identities as they shifted from farmers to factory workers took place. At the same time warehouses marked the city in an indelible way and dominated its urban planning both by their imposing presence and by the changes they initiated. As the workers' struggles moved from the factory to the urban space during the end of the nineteenth and early twentieth centuries, the factory and its life took finally over the whole city. The origins of this narrative rest on my own personal experience of spending my childhood and adulthood in the city of Kavala. The smell of tobacco is still present in the few warehouses that are left and it awakens memories from my childhood.

On the cross roads of architecture and technology studies

In recent technology studies several scholars have used architecture as a guide to understand how technology shapes society and is shaped by it. Take for example the architecture of industrial buildings. As Lindy Biggs has demonstrated, in the American landscape, factory buildings of the nineteenth and early twentieth centuries project powerful images of the enterprises they once housed and reveal important shifts in the ways of production. The shift from small factories to the modern mass-production industries, or in Bigg's terms, the shift to the rational factory, is imprinted on their architectural form. The factory became a grand machine where technological elements workers both functioned with precision and predictability, and where order-a machinelike order-forced, on the one hand, workers to change their traditional work habits, and on the other hand, became the ideal of the engineers and the industrialists. The new geography of the workplace was supposed to satisfy demands such as the moving assembly line, the special purpose machines, and the Taylorized semiskilled workers, all characteristics of the modern American industry the symbol of which became the Highland Park Plant. That was Ford Motor Company's new plant located outside the Detroit city. Built in 1910, the Highland Park marked the development of the rational factory as a predictable and obedient machine. Opening up the factory to the sunlight, separating the management building from the actual work place, introducing elegance together with order, and making buildings accessible to pedestrians, Ford turned his factory to a well running and notable machine (Biggs, 1996: 1991).

In industrial design, architecture was also used as a means to increase productivity by improving the worker's morale. The industrial welfare movement of the late 1910s put an emphasis on social and environmental improvements

such as gardens, classes, libraries, and better factories. Simply, to the mind of industrial engineers, opening up large windows in Highland Park factory or even much earlier in a number of factories in Buffalo, New York, meant that skilled workers would remain and produce more in an environment with better working conditions (Banham, 1986; Hildebrand, 1974; Meyer, 1981; Biggs, 1996).

In the same line of research, Amy Slaton argues that from 1900 to 1930 functionalist concrete buildings dominated the US industrial landscape and conferred, through their architecture, social authority and cultural importance to the achievements of mass production. Several issues related to the advantages of reinforced concrete advocated its use and turned factory buildings remarkably uniform. Such buildings shared the same shape, methods of construction and approach to ornamentation—a fact that made their design easily reproducible (Slaton, 2001). Robert Lewis, nevertheless, stresses the fact that in early 20th century different work realities asked for different manufacturing premises and thus different factory layouts. Design elements were not uniformly diffused among manufacturers who chose selectively to apply those convenient to them. As for example the case of the hat manufacturer Crofut and Knapp shows, different machinery and work processes for the production of low-cost and custom hats respectively, demanded a cellular factory layout instead of parallel assembly lines (Lewis, 2001).

Independently from the issues of uniformity or variability in industrial design, technology studies scholars agree that 'the new factory' has indeed functioned in both a symbolic and pragmatic way. Without doubt, in early 20th century manufacturers used their

factories as cultural icons and symbols of prestige. At a practical level, in turn, being an integral part of the production process, factory design determined the flow of people, materials, and finished goods. The urban sitting of factories closely connected to the issues proximity to transportation and appropriate markets but also to available labor force. Betsy Bradley reminds us that the 'available labor force' often meant a large pool of workers of a particular gender, race, or ethnicity (Bradley, 1999). Thus manufacturers sought to build their industries not simply near large pools of workers but near large pools of workers of a particular gender, race or ethnicity, constructing this way also a particular social hierarchy based on workers' characteristics. Last but not least, factory design did not simply mean a solution to practical problems but the enacting of social transformation in industrialized cities. In a deeper sense industrial design enacted gender, ethnic, or racial identities through spatial arrangements and the labeling of work places. For example, from Roger Horowitz's analysis of the American meatpacking industry we do know that industrial buildings mould gender identities and rate skills according to the gender of those who work in them (Horowitz, 1997).

Instead of viewing factories as mere artifacts of industrial change all the above technology studies explore them as dynamic elements in the production them process and grant importance. Indeed, factories always been built in relation to an urban setting. In early 20th century as cities were steadily colonized by new types of industrial buildings, their urban and social transformation went hand in hand with the formation of new identities for those involved in the industrial

production. Take for example Henry Ford's automobile factory in Highland Park. When Ford commissioned its building to the architect Albert Kahn, it was just outside the official city line in an undeveloped area. Soon the place was transformed into a dense and thriving neighborhood, into a part of the urban life, subverting the city boundaries (Biggs, 1996: 104).

Besides science studies scholars, among the first ones to express their interest in the intertwinement of urban planning and technology were urban historians who as early as in 1979 dedicated a special issue of The Journal of Urban History on technology and the city. The aim of the issue was to examine "the intersection between urban processes and the forces of technological change," keeping however, the traditional notion of technology intact (Tarr, 1979: 275). According to Joel Tarr the city/technology studies ought to serve an instrumental purpose. The study of past technological impacts upon the city could lead to a better assessment of technology and thus better cities in the future. Eight years later in the second issue dedicated by The Journal of Urban *History* on city and technology, the earlier deterministic notion of technology became partly abandoned as techonology was associated with urban culture, economics, and politics. The notion of the city, however, was still considered as a mere setting of technological change (Rose and Tarr, 1987).

This picture began to change only when the Social Construction of Technology (SCOT) altered both the concept of technology and consequently the way the city was understood. Instead of taking as granted that social progress is driven by technological innovation, the constructivist view argues that it is not

technology which drives human action. Using the metaphor of a 'seamless web', technology is understood only through its intimate relation to society, both being weaved into a web whose knots and nodes are indistinguishable (Bijker, Hughes, and Pinch, 1989). Developing this argument further, Keith Grint and Steve Woolgar took up a more flexible metaphor, that of 'technology as text', and claimed that technologies can be interpreted in the same fashion as texts (Grint and Woolgar, 1997). How does, then, the constructivist perspective on technology handle with urban planning and the city?

Studies such as Eduardo Aibar's and Wiebe Bijker's analysis of the plan for the extension of Barcelona during the nineteenth century (Aibar and Bijker, 1997), or Bijker's and Karin Bijsterveld's account of women's participation in public housing in the Netherlands, brought to the fore the relevant social groups that shape both technology and the city, considering city-planning as itself a form of technology and the city as a kind of artifact (Bijker and Bijsterveld, 2000). Instead of viewing the city as a locus of technological activities, in these cases the constructivist approach attempts to identify processes of a mutual shaping of technology and the city. An earlier notion, that of technological frame, is called up to link the thinking and actions of individual actors to the social processes constituting the social groups relevant to the development of an artifact and a technical change (Bijker, 1995).

Situated within the social constructivist approach, this article presents a brief sociohistorical account of the construction of a Mediterranean city in the late nineteenth century as a major tobacco processing center.

I consider the city of Kavala as an artifact that was co-constructed along with its tobacco factories. The city shifted from an introverted, religious organization to a partitioned but socially organized space. Its focal point-focal in the sense of economics, politics, and culture but also in the physical sense of the spatial center—became the area where warehouses were localized. The flourishing of urban life and the spatial and social reorganization of the city went hand in hand with its industrialization. In the following section I will study this process. Before proceeding, though, a terminological note is in order. While 'political' or 'cultural' convey a dynamic of intentionality and human motivation, usually connotes 'spatial' neutrality, and passivity. In my analysis spatial is not a setting for objects, buildings, and people but denotes a set of relations, social strategies and negotiations, all closely bound with place. Moreover, I take that places do not have single, unique identities but are full of internal conflicts over what a place should be, what has already been and for whom.

Constructing a city in the late nineteenth century

At the end of the nineteenth century Kavala, a small town by the sea in northern Greece, was situated in a small peninsula, partly enclosed by a wall and partly surrounded by the sea. The stoned wall, a Byzantine construction, defined the borders of the city, which was still part of the Ottoman Empire. Turks, Jews and a hundred of Greek orthodox families lived in the area known as *Machala*. Foreign travelers from those times have reported that inside the wall the prevailing architecture was the

Turkish style of wooden houses with two floors, having the second one overhung on wooden piles casting a shadow and decreasing the day light over the streets. "Depressing" and dark, the old city was a typical nineteenth century Turkish town where the three main ethnicreligious groups-Muslims, Jews, and Orthodox Christians-were confined into five distinct neighborhoods (Walker, 1864: 13). All of them were organized around their own religious spaces, chose introvert structures such as internal courtyards and many dead-end streets and repeated, in a different scale each, the close organization of the city.

For years, given that the wall prevented any industrial or civic expansion and construction was prohibited outside of it, Greeks and Jews, who had no property in the old city, faced significant housing problems. At the time the Greeks survived mainly through the trade of cotton and the processing of tobacco, done in their already cramped dwellings. It was during the nineteenth century that both tobacco cultivation and tobacco trade were at their peak, as smoking became a popular habit among the Greeks. Especially after the War of Independence in 1821 small tobacco shops (argastiria or toutountzidika) opened their doors to smokers in the busy markets and populous quarters of the cities of Greece and the Greek cities of the Ottoman Empire. Indeed, "the tobacco shopkeeper had always in his workshop bundles of tobacco of every quality, from which he used to cut and sell to his clients, according to their needs. They rarely had other commodities". (Kaplani, 2004: 24).1

In the meanwhile, habits of smoking had changed, which was followed by more serious attempts to turn tobacco into a highly commercial commodity. Chewing tobacco or inhaling snuff through the nose was gradually replaced by rolling cigarettes while nargileh, and pipes were set aside. In 1883 in its first attempts to collect revenues, the Greek state imposed tobacco tax and restrictive measures on the commercial distribution of tobacco and of cigarette paper. The importation, preparation, possession, and sale of the latter became the sole right of the government, turning cigarette paper to a state monopoly. Smokers were obliged to buy wrapped tobacco accompanied by a corresponding quantity of cigarette paper. The epoch of 'four and one' dawned. Orders at the counters of tobacconists were usually four lepta (1/100 of the Greek drachma) for tobacco and one for cigarette paper. The purpose of these restrictions was to eliminate black market trafficking of tobacco since most Greeks used to smuggle tobacco and roll their own cigarettes. In the absence of free traded cigarette paper that was no longer an option (Yakoumaki and Charitatos, 1997).

The increase in cigarette consumption was followed by an increase in the cultivation of tobacco in the apt areas of Macedonia and Thrace. Given its location the city of Kavala soon became the major port for tobacco exports, a development which led to a pressing need for more space both for tobacco storage and processing. The few Greek inhabitants decided to address the Sublime Port, asking for permission to build "houses and workshops" outside the city's walls. In this way, they argued, "the tobacco production will be multiplied customs will be increased hundredfold times" (Angeloudi-Zarkada, 1986a: 9). As a direct request was not supposed to be successful, the Greeks asked for the intervention of the Patriarchate in Istanbul in 1864. What seemed as

a simple city expansion for practical reasons turned out to be a political action, involving complex negotiations between the sultan and the Patriarch. While the city was still under the Ottoman rule, any town planning idea concealed a highly politicized action as the Greeks seemed to claim not only more space but more rights and authority.

Up to 1860 tobacco prices were the local determined by Turkish authorities (especially the bey of Drama, a city west of Kavala) who controlled both producers and merchants. During the end of the nineteenth century, however, and being still under the Ottoman Empire, the area of Macedonia experienced the intrusion of European capital and an economic development based on the international market. The economical treaties between the Ottoman Empire and European countries, such as the 1840 commercial agreement to ban a number of existing Turkish monopolies, opened the space for economic development to both Greeks and Jews of the area. Soon the powerful bey of Drama was set aside by international export companies and tobacco traders who now negotiated prices directly with the producers. Up to that time tobacco remained in the hands of the farmers till its transportation to the Greeks' dwellings within Kavala's walls or in small warehouses outside the city where it was processed for exportation. In this context the Greeks' demand to expand their city set the stage for the decline of the Empire in the area, and for the transfer of its power to the European capital.

Although it is not clear when exactly the Turks issued the relevant *firman* allowing to expand the city, the first Greek Orthodox Church was built outside of the city's walls in 1866 (Angeloudi-Zarkada, 1986a).² During the first period

of the city's expansion and due to the lack of suitable industrial premises, the major tobacco merchants and exporters began to pour prodigious sums of money into building the first tobacco warehouses. An early example of these is the Latinou kapnomagazo that was built right on Kavala's coast line around 1850. The building belonged to the Fratelli Allatini Company, a Jewish family that owned already a large flour mill in Thessaloniki. The two Allatini brothers were also involved in making high quality bricks and roofing tiles as partners of the French Les Grands Moulins de Corbeil group and were active in various commercial sectors, including tobacco. The Latinou supplied mainly the Italian tobacco monopoly and was directed by the Misdraxi brothers, a wealthy Jewish family. It was later renamed into The Commercial Company of Salonika Limited.

A decade later, Abbott and Francis Kinney, having one of the most popular brands of hand rolled cigarettes in the USA, the "Sweet Caporal", and owning big warehouses in North Carolina and Virginia, decided that foreign tobacco would be a novelty to increase sales. Their company, the Kinney Brothers Tobacco Business, was located in New York City, and they collaborated in Europe with the Lubbock Company situated in London. In 1860 the Kinney brothers built the second big warehouse in the city spending a grandiose amount of money (15,000 English pounds) on it (Lykourinos, 1997: 98). Among the most representative examples of this early industrial design were also the warehouses of the Austro-Hungarian company Herzog et Cie. The company was founded by the Jewish Baron Pierre Herzog in 1889 and managed by Adolph Wix von Zsolnay, a German Jew who

served as the German and Austrian consul in the city. In 1905, *Herzog et Cie* became the main supplier of the Sultan in Istanbul.³

Companies and individual merchants invested in building warehouses such as the above outside of the wall for mainly two purposes. First, warehouses served indeed as stockrooms for storing unprocessed tobacco. Second, inside the warehouses a number of newly arrived workers-men and women alike-processed tobacco by hand and prepared it for shipping out of Kavala's port in all over the world. Tobacco exports were directed to the Habsburg Empire, Russia, England, Egypt, France, and even to the United States. The city attracted both the Greek bourgeoisie-retailers who traded tobacco as independent exporters mainly to the Balkans, Russia, Egypt, and Turkey—and European corporations, powerful investors who built their own warehouses and often had the double role as their country's consuls and that of tobacco merchants. It is indicative that by 1880 all the major European countries had founded their consulates in the city of Kavala (Lykourinos, 1997: 107).

Nevertheless, in the late nineteenth and early twentieth century Greece, industrial development was more a cultural and less an economic issue, in the sense that industry was linked to the development of technical education and not to the increase of production. The newly created Greek state was evolved around the agricultural and commercial ideal of development rather than that of industrial expansion. Taking for granted that Greece was not capable of competing with European industrial states by establishing competitive factories, Greek politicians argued for better technical training as a response to the country's needs (Chatzeiosif, 1986; Antoniou,

2006). Nonetheless, in his 1900 report to the Ministry of External Affairs, Georgios Sarros, the Greek consul of Kavala, pointed out a deficiency of this policy. He ascertained the Greek government that the inadequate economic policy of the state towards the development of tobacco industry and the lack of support to Greek tobacco merchants in the area of Macedonia-still under the rule of the Ottoman Empire-would lead to the economic dominance of the Hapsburgs and to the loss of any Greek control over the area (Lykourinos, 1997: 118-132). Indeed the local Greek merchants were soon overshadowed by Règie (Co-interesèe de tabacs de l' Empire Ottoman), a company that monopolized the tobacco trade within the Empire. By 1910 French and Habsburg monopoles had taken over the tobacco trade and controlled exports from Kavala's port to all over the world (Stefanidou, 2007: 177).

The architecture of tobacco processing

One way to read Kavala's expansion is to look at the newly erected tobacco warehouses as investments and solutions practical production challenges. Indeed, the first tobacco factories were built right on the city's coast line to facilitate the transportation of processed tobacco. "They were so near to the sea that often fury waves pounded their walls" (Pegios, 1984: 17). Those that were constructed later occupied a sizeable semicircle area behind the front line which also included all the important economic functions of the new city: The Ottoman Empire Bank, the Ottoman Agricultural Bank, the Austrian and French shipping agencies, the foreign consulates, and the Austrian and French post offices (Stefanidou, 2007: 296).

In 1879 according to *Klio*, a Greek newspaper which was published in Trieste, Kavala was already known in European political and business



Photo 1. A row of newly-built tobacco warehouses by the sea in Kavala. A fully-laden barge is transporting bales of tobacco out to sea. By the early twentieth century most tobacco warehouses were concentrated on the coastal zone, were three or four storeys high, and often built in complexes. (Courtesy of the Kavala Municipal Museum)

circles as one of the most important commercial centers and key ports in northeast Macedonia, overshadowing even Thessaloniki, due to its tobacco and cotton exports (Angeloudi-Zarkada, 1986a: 10). By the end of the nineteenth century around 4,000 tons of tobacco were sent abroad annually from Kavala's port mainly by the two major companies that operated in the city—the Austrian Herzog et Cie and the Italian Fratelli Allatini (Stefanidou, 2007: 174). Fortnightly the Austrian steamboat Loyd and two French ones approached the city's port while a number of Turkish, Italian, and English boats carried special itineraries according to the needs of export.4 According to a report of the chief financier of Macedonia in 1913, there were 61 tobacco trading houses in Kavala and the city exported at least four times more tobacco than Thessaloniki (Stefanidou, 2007:171).

The first tobacco warehouses that appeared in the city were small, plain buildings, two-storey in unfaced stone. Their form precisely followed their function: light was required for processing and darkness for storage, so warehouse architecture ensured ample light high up and shade down below. On the ground floor, windows on all four sides ensured good ventilation and prevented rotting, but were kept small to limit the light to which the raw tobacco piled in wooden crates or 'cots' was exposed. The processing took place upstairs, where the windows were larger and let in more light. Skylights were employed when this was insufficient.

The floor-plans of the warehouses were rectangular, with the frontage placed on one of the narrower sides. Roofs were wooden, hipped, and covered with Byzantine tiles. Supported on one of the two walls, the stairwells were positioned so that one ascends in parallel

with the building's long axis; this allowed the bundles of tobacco to be transported from one floor to another as safely and easily as possible. The early warehouses were free-standing buildings on all four sides, which ensured that the top floor where the tobacco was processed enjoyed optimal lighting conditions.

A noteworthy feature of these early buildings is that every kapnomagazo had just one door, and that this was built on a smaller scale than one would expect in public industrial buildings of this sort. An initial explanation lies in the fact that tobacco was still carried by hand at this time, which meant the door had only to be large enough to afford entry to a loaded porter (or 'stevedore' in the industry idiom). Nonetheless, one can also read forms of labor policy and worker control into the doors' diminutive stature. The sole central entrance to the kapnomagazo was guarded by a kavazis and a kavazaina, a man and a woman whose duty was to physically search the male and female workers respectively at the end of the day (Pegios, 1984, 27). Interestingly enough this search served two purposes. First, it restricted the amount of company tobacco smuggled out of the factory and illicitly smoked by the workers. Dexterous as they were, tobacco workers rolled the stolen blend in the cigarette paper and had ready handmade cigarettes. Secondly, the single door served as a control mechanism during large-scale industrial action, making it easy to locate the strikers and thus limit their access to the kapnomagaza, leaving strike-breakers safe in the interior of the building.

In the early twentieth century the boom in the tobacco trade was once again reflected in the design of tobacco warehouses. As the architect Sappho Angeloudi has noted: "the tobacco warehouses of this era are considerably larger than older structures, but built in the same way with timber and stone though with two or more wooden saddleback roofs. Typical features of these new buildings were their symmetrical windows and triangular roof pediments which often housed rectangular or round skylights" (Angeloudi-Zarkada, 1986a: 11). Designed to satisfy mostly the foreign wealthy merchants who arrived in Kavala to do business, the new buildings were built in the popular neoclassical except for a few examples whose architecture reflects German neoclassicism. The corners and ground floor were often faced with rusticated quoins, and the floors were marked by external bands which emphasized the buildings' horizontal axes. Balconies were rare, but when included were metal with wrought-iron railings and ornate corbels.

The warehouses of this period had three to four storeys and were often extended in a cluster of two buildings. The impressive footbridges which spanned the street to connect the adjacent tobacco warehouses featured the same decorative devices evident in the new warehouses themselves. The bridges were functional



structures. When space for new buildings became limited and it proved necessary to build warehouses abutting on each other, lighting became a problem. These small, metal open-air passages connecting warehouses belonging to the same merchant provided a solution.

left Interiors were largely unpartitioned, providing large open areas for working while floors, ceilings and roofs remained wooden. There would scarcely be a well inside the building to supply the upper storeys with water and to maintain the desired level of humidity in the tobacco storage areas. These new warehouses always featured double doors with ornate ironwork on the outside and wood and glass on the inside. In some, the entrances were decorated or formed a triangular pediment inscribed with the name of the owner or a company that built it and the date of completion.5 Actually the tobacco factories of this period represent the elevation of tobacco trade to a cultural prestige, besides the economic flourishing of the foreign merchants. Warehouses embodied the willingness of their designers and owners to publicize the fact that their business had truly taken off in Europe and elsewhere.

Industrial architecture: A mechanism for configuring identities

The architecture of tobacco warehouses acted as a guidance and daily reminder

Photo 2. The method of bridging was applied to connect the warehouses of the Austrian Tobacco Monopoly—now converted into a shopping arcade—and those of the Schinasi Brothers—shown here—a New York-based, Jewish-owned firm in Kavala build in 1910. (Courtesy of Kamilo Nollas)

for the workers of who they were and where they stood. Both new and old structures expressed traditional modes of work and imposed equally traditional identities to workers. Tobacco was processed entirely by hand until the late 1920s. The processing took place on the upper storeys of the warehouses-in the salonia, as they were called—where both men and women were employed. The culture of the daily labor—the unwritten rules governing the workers' behavior, the way in which the work was carried out and the manner in which each individual worker perceived his/her place in the hierarchy of ability and skills, reveals a powerfully gendered system of workplace conventions.

The work was divided between men and women forming two main areas of expertise integrated into a clear hierarchy. The men (the dektsides or exastratzides) were responsible for the initial division of the tobacco leaves by their quality. They sat in pairs on rush mats on the floor next to the windows. Until the tobacco warehouses acquired electric lighting, the window positions were privileged over all the others. Younger and less experienced pickers were responsible for the second and third selections, and they, too, sat in pairs, though back to back. Each pair of experienced pickers had a female worker (the pastaltzou) sitting crosslegged about half a meter away. She was responsible for the lower-quality tobacco leaves and for stacking the chosen leaves into small piles (pastalia); in other words, she assisted the dektsides in the menial task of stacking the tobacco leaves and was receiving lower wage than them. Furthermore, women were barred from becoming dektsides, which kept power relations clear in the workplace (Avdela, 1993).

The interiors were open-plan, not only in order to facilitate work but to

provide a good overview of the labor force. The groups of three-two men and a female tobacco worker-were arranged in the large, open salonia so that the foreman could see what all of them were doing. The foreman-there were no forewomen—was responsible for one or two salonia and for seventy to hundred workers. He held considerable power over the workplace, as he laid down the workers' wages on the basis of their proficiency, selected the deftests, and assigned tasks on the basis of the workers' experience. Subject to company approval, the foremen were elected by the workers and had to be well-liked and accepted by them in the rooms they oversaw (Pegios, 1984: 25-26).

Most of the people who arrived in the city as seasonal tobacco workers at the end of the nineteenth century came from rural areas and were not used to any industrial kind of work discipline. The architecture of their workspace to provide such training and transform previous farmers to industrial workers. The spatial arrangement of tobacco warehouses incorporated system of power in which discipline and surveillance, in Michael Foucault's terms, played a key role. Guards at the entrances, narrow doors, open spaces, split shifts (7.00 - 11.00 in the morning; 1.30-5.00 in the afternoon) are all facets of an architecture designed with industrial discipline in mind.

A unique feature this early industrial design was the attention-grabbing ritual of the workers' entry and exit the warehouses. On spring and summer mornings, the male tobacco workers were first to arrive, surging through the entrance; their arrival—like their departure—marked by the factory bell. Fifteen minutes later and after the signal of the same bell, women would start work, finishing a quarter of an hour

later than men at noon. The wages of the workers were recorded in an equally noisy way: On entering the factories, the workers would throw their tokens into a metal box; every clang meant another day's wage (Pegios, 1986: 27). Thus the architecture and the rituals associated with it served to highlight the gender hierarchies in tobacco processing. The lower wages of women and the lower rating of their skills were mapped onto the space. The buildings and their spatial arrangements both served as evidence of gender discriminations and as active agents in the exercise of power in the work place.

At the same time the architecture, especially the architecture of the later warehouses, refashioned prestigious identities for the tobacco merchants. When the director of the Herzog et Cie moved his offices to a monumental building in neo-Gothic design built especially for the company in the beginning of the twentieth century, clearly space was manipulated to present the tobacco company publicly through architecture. The same need was satisfied through decorative elements, impressive façades, and inscriptions of the owners' names in the tobacco warehouses of the early twentieth century.

Reading the city through its architecture

A focus on the practical side of the tobacco warehouses, however, obscures the more interesting issues of social, political, and spatial that enacted transformations industrialization of the city. Obviously, the new urban structure followed the emerging social stratifications. In the area around the warehouses potent tobacco merchants who formed the new Greek bourgeoisie built their mansions,

imposing houses in neoclassical design. First closer to the sea and later in a small distance from the coast line, the numerous impressive dwellings evolved to a prestigious neighborhood known as Saint John, having as its center the first Greek Orthodox Church that was built out of the city's walls. Several mansions, the most remarkable of all and sited in the most central location of the seafront, belonged to foreign tobacco merchants and consuls.⁶

The economic development of the city went hand in hand with its cultural and educational flourishing. The first boys' school was built in 1881 followed by a girls' school in 1894, located in the seafront (Angeloudi-Zarkada, 1986b). A couple of luxurious hotels such as Hotel Kathé and Grand Hotel hosted the important visitors of the city, whereas their restaurants functioned as entertainment centers for the local bourgeoisie (Stefanidou, 2007: 300). All were sited at the newly defined center of the city around the warehouses with their facades directly facing the streets. Finally the city had abandoned the earlier introvert structures and had turned its face to the open space.

While the inflow of money from tobacco exports empowered Greek merchants and foreign monopolies, tobacco workers owned only precious skill: separating tobacco leaves by their quality. The tobacco processing was done mainly from late spring to early autumn months and thus most of the workers were seasonal. As in most similar cases of the cities' industrialization, workers came from the rural areas around Kavala, hoping to be employed to the tobacco rising industry. The majority of the newcomers were Greeks. While before the city's expansion beyond its walls the number of Greek men according to a Turkish census were only

a hundred, a decade later they reached almost 2,700. In 1909 the population of the city had grown to 12,000 (Lykourinos, 1997:102). Besides the Muslims and the Greek orthodox population which in the beginning of the 20th century were equally represented in the city, the third religious-ethnic group was Jews which amounted only to the 6-8 per cent of the total population (Stefanidou, 2007:139). Those who were engaged in jobs related to tobacco industry were mainly cramped in a neighborhood with a multiethnic character in the northwest part of the city, overseeing the warehouses. In this case people lived in shanties or small houses without a religious point of reference.

Built on a hill, the expanded city slowly acquired an amphitheatrical shape, having as its central stage the semicircular area of tobacco factories. The everyday scenes that were once played out in these spaces, the colours and exchanges in the city streets, the smell of tobacco, and the people who processed it are telling.

The city was a veritable bee-hive when the human bees entered and left the tobacco warehouses. The men finished first and the narrow streets flooded with a mass of humanity whose only distinguishing features from a distance were their red-fez or straw boater-covered heads. Just as the male tide has receded, a second wave followed ten minutes later, women this time, in black aprons holding colourful parasols to protect them from the hot summer sun. (Pegios, 1984: 16-17)

The peaceful days of the city were very often disturbed, however, by street riots. As early as 1896 tobacco workers who demanded better wages organized the first massive demonstration in the streets around the warehouses. The uprising ended with the brutal intervention of

the local gendarmerie and a killing of an official from the Ottoman Monopoly of Tobacco (Pegios, 1984: 13; Vyzikas, 1994: 12-13). Throughout the first decade of the 20th century Kavala was shacked by several major strikes. Unionists, including Greeks, Muslims, and Jews, were fighting for the increase of wages and the decrease of work time.

Unemployed workers holding from the hand their small kids (that was also a way of struggle) went downhill from all the city's neighborhoods. Waving black flags and having heart-breaking voices they asked for work—benefits—mess...Thus all together made up an endless streamline which flooded the city's narrow streets. (Pegios, 1984: 57)

Technological changes along political upheavals during the 1910s further radicalized tobacco unionists. From 1910 to 1914—the first term of Venizelos government-Eleftherios development economic in was equated to the development of agriculture and wealth in general. The State control of the economy expanded significantly with Venizelos' second term in government from 1917 to 1920. While some efforts for the establishment of basic technical infrastructures such as the construction of the Greek State Railways were taken, industry was still a matter of plans on paper. Yet, in the area of tobacco industry the introduction of cigarettemachines, a technological innovation for making machine rolled cigarettes, led to a significant reduction of wages. In addition the introduction of tonga, a tobacco pressing machine in the commercial salonia of major companies in the country resulted to a further gendering of skills because only women were allowed to work on them. To the radicalization of tobacco workers

Venizelos' response was to roughen his politics and to issue relevant laws that made difficult to exercise the right to strike (Agriantoni, 2006). Later on, throughout the 1920s and 1930s, what strikes were to the production process in the factory, workers demonstrations were to the everyday life of every tobacco city.

Indeed in June 1928 Kavala's tobacco workers had called the biggest strike in the town's history. Paul Collart, a Swiss archaeologist who happened to pass by the city, briefly described "Tuesday June 12. Kavala in the morning. Strike of tobacco workers; patrols on the streets" (Bielman et al., 2001: 21). Although he drove straight through the town a day after the events, Collart still noted the local gendarmerie patrolling the streets. Those had been seething just a few hours earlier with angry demonstrators and gendarmes determined to break the strike and willing to get rough to do it (Vyzikas, 1994).

In the early 1930s the introduction of tonga in Kavala's warehouses and the mechanization of tobacco processing brought the workers directly affected into confrontations with police on the streets and in the city's kapnomagaza during a strike with an unprecedented high participation; a strike which was to have a significant knock-on effect on the fate of Greece's tobacco union movement. It was a short announcement that sent the city into convulsions over five days, made the headlines in Athens, and led to questions being asked in the Parliament. In July 20, 1933 one of Kavala's tobacco companies that used the tonga machine posted a notice at the entrance to its warehouses stating that all the male workers were to be dismissed in three days time. Henceforth, the company would employ only female workers who would work the tonga machines. Staffing the tonga exclusively with women would cut processing costs by half due to their



Photo 3. A panoramic view of the city of Kavala taken by Paul Collart most probably in the early 1930s. On the right it is shown the old town confined by the wall and the aqua duct that was still in use until the late 1960s. On the coast line one can see the tobacco warehouses. (Courtesy of the Institute of Archeology and the Sciences of Antiquity, Paul Collart Collection)

low wages and also weaken the male dominated unions. That afternoon, the male workers decided to stage a sit-in in protest over the management's decision. The striking workers shouted their slogan out the windows-"men on the tonga!"-while their wives and children demonstrated in town. The men kept up the sit-in for five full days barricaded in among the bales of tobacco with little in the way of food and water, and only left the building after the government had promised their demands would be met. That same year, Law 5817/710/1933 made it compulsory to "employ male workers in the tonga process".

Conclusion

In this paper I have explored the boundaries between the tobacco warehouses and the city, which allowed also the political clashes between unionists and police to come into view. The warehouses studied, served as natural mechanisms for creating the limits bounding private and public spaces and their hierarchy, the relations between skilled and unskilled workers, the overseers and the overseen, and, finally, the strikers and strike breakers.

Throughout the paper I have argued that these early industrial buildings have subverted spatial boundaries and configured identities in many respects. First of all, early tobacco businessmen chose to site their tobacco warehouses in such a way in the urban map that production was to be increased. They favored proximity to transportation, to tobacco production, and to an available labor force. Soon Kavala evolved to a major trade center and a political spot in an unsettled geographical map. The city's bourgeoisie—local tobacco merchants, several consuls of European countries, and international businessmenredefined its center, its character, as well as its borders. By doing so they also refashioned themselves as powerful manufacturers and publicly presented their achievements.

Second, the newly coming, underpaid, and seasonal workers were turned into factory employees through the work culture and rituals inscribed into the space inside the warehouses. Despite the fact that they were never granted a voice in the urban planning of the city, workers were able to deeply affect it. Unable to afford dwellings in the city's center they primarily resided in a neighbourhood situated in the northwest part of Kavala, turning it to a quarter of resistance. As early as in the end of the nineteenth century a large number of riots erupted in the streets of the city and work life shifted from the warehouses to the urban space. The streets of the city became the natural extension of the work place and served as spaces of violent fights and resistance.

Last, spatial arrangements inside the warehouses denoted the gendering of skills that related to traditional tobacco work. During the 1920s and 1930s technological changes in tobacco processing entirely undermined the form of daily tasks and transformed the unwritten rules governing work in the tobacco salonia. The established gender hierarchies and power structures among the workers were now jeopardized by men's exclusion from tonga. As buildings can play an active role in transforming identities and serve as proofs of the change; the kapnomagaza were to do the same.

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Notes

- 1 The tobacco merchants (*toutoudzis*) formed a guild of their own in the Ottoman empire (Ioannidis, 1998: 13).
- 2 Firman or ferman was a royal mandate or decree issued by the Sultan in the Ottoman Empire on the occupied states and ethnicities. The purpose of firmans was, among other things, to regulate the relations and status, the duties and dress of aristocracy and other subjects.
- 3 Unfortunately, we know nothing about the architects who designed those early buildings since the city's urban archives were destroyed during the Bulgarian occupation. The sources that have been used for this study include mainly published accounts of foreign travelers and local historians and a published biographical

- account by Georgios Pegios who was a member of the Greek Communist Party and of the tobacco trade union. I also consulted documents from the General State Archives that have been published in several of the local histories. Instrumental to the study have been several photographs from the archive of the Municipal Museum of Kavala and a few from Paul Collart's collection. The paper could not have been written, nonetheless, had I not experienced the life in the city as an inhabitant during my childhood and adolescence.
- 4 Georgios Sarros to the Greek Ministry of External Affairs, January 24, 1900. General State Archives (GSA), Prefecture of Kavala. Although the citizens of Kavala had been asking for the construction and expansion of the port since 1892, this was not constructed until the 1930s. At the time the steamers anchored out to sea and small barges transferred the tobacco bundles to them (Pegios, 1986:17).
- 5 *Mormori, Popi. Οι Καπναποθήκες της Καβάλας* [Kavala's tobacco warehouses] undated and unpublished thesis, Kavala's Municipal Library.
- 6 Today one of these buildings—Peter Herzog's mansion (1890)—houses the city hall of Kavala.

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