Thanasis Betas, “From Tobacco-Shop to Cigarette Industry. Technological Changes in a Greek Cigarette Factory in the Early 20th Century”. International Conference, Tobacco Roads: Technology Transfer in the Tobacco Industry during the Early Twentieth Century. Kavala, Greece, 5-7 July 2013

Before I start, I’d like to thank the organization committee for giving me the opportunity to participate in such an interesting international conference.

The two branches of tobacco industry, tobacco-process and cigarette making, have much in common and in many cases created relations of independence. However, it would be wrong to consider that it is about similar and common places. The differences between them were intense and substantial in many levels: in the raw materials that they used, in the geographical contribution, in the markets where the products were going to be sold, in the terms and the working conditions of workers, as well as in their demands. This presentation is an attempt to touch on issues that concern the cigarette-making.

In about 1890, the systematic manufacture of handmade cigarettes begins in the public tobacco-factories of Greece. The first cigarette-makers arrive in Greece from Istanbul and Alexandria, where the making of handmade cigarettes had started earlier. A few years later – mainly in the decades of 1910 and 1920 – the introduction of cigarette-making machines, the mechanization of the field and finally the abolition of handmade cigarettes rendered the profession of cigarette-maker inoperative, at least in the sense of handmade cigarette-making.

The cigarette – production factories will appear from the mid1910s in or next to the commercial centers of South Greece, in several cities. The first factories of cigarette production were created where there was a sell-in market of their products, that is they had, “market orientation”. The basic factor which affected the placing of the cigarette-making units was the existence of consumer centers where their products were channeled. With the annexation of the new districts after 1913 the spatial structure of the distribution of cigarette factories will not change. They will remain concentrated in the cities of South Greece and they will manage to

spread their products to the north part of the country, changing the smoking habits of the residents of these areas.

This situation will not change either during the period of Midwar. The cigarette production factories during the Midwar period are dispersed in several cities mostly of South Greece. However, there are cigarette industries in certain urban centres of the North, too, such as Thessaloniki and Xanthi. But, what is subsequently noticed is as much a trend of geographical concentration of cigarette industry in fewer and fewer urban centers, as a concentration of production in fewer factories. Therefore in the late 1930s, one can talk about an oligopolistic character of the field, since the biggest part of the domestic production – way over the half – is concentrated in three factories: In "Papastratos" and "Keranis" factories in Piraeus, and in "Matsagos" factory in Volos. Perhaps the mechanization of production rendered the cigarette industries that couldn't follow the technological developments non-competitive. In these frameworks, the development of Matsagos cigarette industry in Volos can partly be explained.

The context of my presentation pertains to the city of Volos from the dawn to the 20th ct. until the end of the mid-war period. The city and the cigarette factory seem to follow "parallel" routes. In post-ottoman Volos, just nine years after the city' s incorporation into Greece in 1881, Nick Matsaggos establishes a small tobacco shop in 1890 and, as the city is expanding with the passage of the century, the tobacco shop also "transforms" into a cigarette factory. How the technology and the mechanization of production affect the division of labour in Matsagos cigarette industry is the main question of this presentation. In order to approach this question, we selected the "material" that interests us, such as technical reports, and workers' registers, from the archive of Matsaggos, as well as photos and oral testimonies.

With the annexation of Thessaly in the Greek State in 1881, Volos entered a period of transformation. Volos very soon became a field of vigorous industrial activity and converted in the second –after Piraeus- industrial center of "Old Greece" at the end of the 19th century. Its population was constantly increasing –from 4, 987 residents

in 1881 it reached 11,029 in 1889 and 23,563 in 1907- the activity around smoke was particularly intense, concerning as much the tobacco industrial processing as the cigarette making.

In “Guide-book of Volos” of 1901, 14 tobacco trade firms and 24 tobacco-shops are registered, among them this of Nick Matsagos, which were located in the center of the city, in Dimitriados street, the central-shopping street in this era. Similarly, in the commerce guide “Volos-Pilio-Almyros” of 1911, 18 tobacco- trade firms and 12 tobacco-shops are mentioned, among them this of Nick Matsagos. As the city is getting bigger and smoking as a habit is “adopted” by a greater and greater part of the population, some tobacconists decide to attain the “passage” from the tobacco trade and hand-made cigarette making to the cigarette industry. One of these tobacco sellers was N. Matsaggos, from Pilio, who passed from tobacco trade and the small tobacco-shop he had opened in 1890 in Volos to cigarette production industry, establishing the first private tobacco-cutting in “Old Greece” in 1919.

The transition of small work-shop of handmade cigarette-making to Matsagos cigarette industry is signaled by the gradual expansion of the buildings where the new factory will be housed as well as the rapid expansion of the mechanical equipment mostly during the 1920s.

During the first decades of the 20th ct., almost all the world pointed to the adoption of a type of smoke product: the cigarette. James Bonsack from Salem, Virginia, USA, constructed his cigarette making machine in 1881.The invention of this making machine can be considered as the important change in the history of smoke production. Internationally, the mechanization of production resulted in the transition from hand-made cigarette making to the industrial cigarette. This machine produced 200 cigarettes a minute, which -until then- were produced by 40 cigarette makers with their hands. The first cigarette factory that immediately established Bonsack’s machine, creating a wide range production of cigarettes was “Wills Company” in United Kingdom.

The cigarette making machine of Bonsack belongs to the new technologies of the so-called “Second Technological Revolution”, where the technological change was

accompanied by an horizontal separation based on gender. When this cigarette making machine was introduced in the market in the decade of 1880, a gender division of labour took place in all the countries where there was cigarette industry, imposing the execution of different tasks between men and women in the workplace. Technology and "professional separation" based on gender were tightly interwoven concepts in the branch of tobacco industry and more specifically in cigarette production.

In Greece, the mechanization of the field of cigarette making in the first quarter of the 20th ct. caused serious unemployment in the field. Until the end of First World War, there was massive import of cigarette machines in Greece. About 18 machines of this kind were in operation in 1918 and about 2,500 cigarette makers were out of work. In 1920, when the unemployment of the cigarette makers reached great proportions, the Greek government was quick to compensate those workers who had been made redundant by the machines.

The mechanization of Matsagos factory begun in 1910. Then, Nick Matsagos imported the first tobacco-cutting machine of the English brand "Leng" of small output, one of the first that had been made. In 1918, after the end of World War I, the management of the enterprise was assigned to his two sons, Ioannis and Constantinos. Thus, a Limited Company was founded, whose general partners were Ioannis and Constantinos Matsaggos and silent partner was their father, Nickolaos. In 1918 Ioannis and Constantinos Matsaggos first took the decision to stop dealing with tobacco trade and deal exclusively with cigarette industry.

The business of the company started to develop and for this reason another tobacco-cutting machine was bought of the same brand with the previous (Leng), as well as a machine for making cigarette-paper tubes, which were hand made since then. In 1920, the first cigarette-making machine was ordered, of the brand "Standad", made in U.S.A., and then, because the consumption was constantly increasing, three more cigarette-making machines were bought of the same company with "Leng".

Generally, between 1925 and 1935 3 tobacco-cutting machines and 3 cigarette making machines -made in Germany of the brand "Universal-Maschine"- were bought totally, as well as a packet-making plant and a lithography plant. As the consumption was increasing steadily until 1940 the mechanical equipment of the factory was regularly supplemented.

In those sections which have been mechanized in the early 1920s –at least up to a point- domination of male workforce is observed. This fact is particularly visible in the "cutting" section (blends) and the cigarette machines. There, the men were charged with the use of machines, while the women performed a clearly manual task, such as this of the picking of the cigarettes.

On the contrary, the most important volume of female work is noticed in the sections of packet-making, packaging and packing, which were sections with a very low level of mechanization, where the labour process until the 1950s was carried out almost entirely by hand. Working in these departments seemed to require certain basic characteristics. The women workers who worked in the specific post had to work their hands very fast and uninterruptedly in order to meet the requirements of the business. Whoever workers were not efficient to the degree the business had appointed were fired or, at the best of times, changed work section.

Thus, the basic feature of the labour process in Matsagos cigarette industry during this period -as occurred in other cigarette industries in the world too- was the gender division of labour. The role, the position and the responsibilities of any worker were predefined into the workplace: the gender and the technical division of labour was the contributory factor which identified the deferent roles among the workers in the process of production. The most upgraded specialties, which required technical knowledge, were almost covered by men, while women performed work that was regarded as "subordinate and auxiliary" work.

A female worker, who worked in the cigarette industry for 24 years from 1938 until 1962 – most of them as a "packer" – remembers: *"… in packaging there used to work the best and fastest women, the "first hands".*

Another female worker was occupied in Matsagos for 13 years (1938-1951). She worked mainly as a "packer": She says: *"We were shown the work of a packer by the older ones. There was also a woman who was in charge and showed us how to fill the different packets. But we had to learn fast… There were also many who didn't learn and were sent away…".*

It appears that the work of packaging required a kind of skill and "specialization" that the women acquired after a short "apprenticeship". We would point out that the dexterity of the manual work of the women workers in the packaging section played an important role in the production process and, by extension, in the profits of the business. The faster the women worked, the more packets of cigarettes were channeled in the market for consumption.

For this reason, the foremen were constantly pressing the packers to intensify the pace of their work and their performance. The presence of the foremen is easily visible in the photos. As we can see the female workers standing adjacent to one another or one behind the other were continually under the strict supervision of the foremen. This fact is remarkably noticed mainly in those departments of the factory where the mechanization of production was in a very low level or it was completely absent, such as packing and packaging. It could be argued that a crucial factor which shaped the organization of labour, the geography of the workplace in Matsagos and the spatial distribution of employees was the "need" of surveillance and control of the workers.

This case is not based only upon the photographical material but also rests on "evidence" that came from Matsagos archive. In employees' personnel cards there were noticed –besides the personnel data such as the age, the origin and the marital status- the post of each workers in the workplace and special notes that "accompanied" each worker concerning his or her performance, his or her working ability, as well as the reasons of his absence from his work or any misconduct that he committed. This recording which put the workers in a context of documents renders them at the same time in a field of surveillance. Through this record the workers are

identified and evaluated. As M. Foucault has noticed *"…a power of document is formed as a component element of the mechanism of the surveillance".*

At the same time, some of the "fastest" packers were "upgraded" as women in charge and heads of the women workers. In this way, apart from the higher wages they received in comparison with the others, they seem to have gained reputation and prestige among the women workers. A female worker who worked in the cigarette industry – mainly as a packer –from 1933 to 1957 mentions:

"There were some women workers whose hands were working even faster than the machines… They stood out and over the years the best became women in charge… supervisors… They earned more… and the bosses respected them".

As it becomes obvious through technical reports that were found in Matsagos archive, the introduction of machines in the section of packet-making - in 1930s- brought about changes in the labour process and seems to have threatened the position of women workers in this section. It seems that with mechanization of production, many women workers of the packet-making section either lost their job or were rendered completely "unskilled". Nevertheless, this was not the case for all of them. On the contrary, a number of women workers were occupied in new posts, acquiring new "skills", for example "group-cluster workers", "workers of ruling-machines" and "workers of sticking of necks and covering boxes".

Conclusions

Summing up, the introduction of machines in the field of cigarette making in the first decades of 20th ct. offered to the cigarette manufacturers a powerful weapon of extortion of working effort and appropriation of surplus-value. Thanks to its characteristic to replace skills, the mechanization increased the productivity that is potentially included in given quantity of working effort or skill. The mechanization not only allowed the use of a more disciplined and cheaper work force, but increasing the reserve army of the unemployed who competed for the specialized

positions, rendered those who had a job more and more dependent on the employers.

At the same time, the mechanization of production in the field of cigarette-making brought about changes in the labour process and in the organization of labor. The introduction of machines and the gradual automation of production resulted in an even bigger division of labor by stages of process of the product and created new professional specialties. But at the same time, many of the old "traditional" posts remained and co-existed in the factory with the new ones. The new specialties, however, created new hierarchies within the production system. The question is who were occupied in the ''best'' posts -about remuneration and prestige -and who in the theoretically ''secondary'' and assisting.

The use of technology in Matsaggos industry did not concern only men, nor were the new posts that were created with the mechanization intended exclusively for them. Men as well as women were occupied in the machines. But there was a clear differentiation and gender segregation, concerning the relationship of men and women with the technology and the roles they assumed in the labor process.

The well-paid jobs were very few and concerned a small part of the male work force. As it results from the pay-rolls of the archive -which for obvious reasons cannot be presented analytically in this presentation- the ceiling of the wages was formed to a great extent based on the hierarchy that was created from the specialties. The employees with technical knowledge were the most skilled in the factory and besides their higher wages we could say that they wielded significant power over those-men and women-who were dependent on their knowledge. On the contrary, those who lacked special technical knowledge were occupied in jobs that were considered auxiliary and secondary on the whole and were paid lower.

Therefore, after the implementation of the technological changes that saved efforts and replaced skills, some vitally important groups of workers maintained an important control over the organization of labour in the factory. The managerial organization left to these small but important groups of workers a control over the recruitment, the training, the supervision and the control of the unskilled workers,

over the repair and the speed of the mechanical equipment and over the division of labour in the workplace.

As far as the female labor is concerned, it could be argued that it was not homogeneous. There were contrasts in its interior, concerning the kind of labor, the specialties and the (high) level of its payment. The concept of ‘‘specialization’’ concerning the female labor in the cigarette industry was not associated with technical knowledge but with the skill and the ability of women workers to work as fast and efficiently as possible. This ‘‘ability’’ determined and differentiated as much the ceiling of the payment of each worker, as the position she had in the hierarchy in the place of production.

Finally, we would notice that the productivity of Matsagos was not based as much or only on the machinery but mainly on the labour intensity of female labour, as parallel to the mechanization of production traditional posts that required manual work also remained. That means that the increase in productivity and the resultant expansion of the factory which becomes obvious during the Midwar period was based on a complex system of labour organization which concerned the different systems of labour remuneration, the occasional occupation, the strict supervision and punishment of those who did not follow the rules, and generally the systems that were constructed on relations of exploitation, discipline and control of the work force. As elsewhere, here too, it seems that the cheaper price of female labour was the main reason of its “domination” over the men one.

Ultimately, the benefit and the success of Matsagos factory during the Midwar period may not have been derived as much from the wide scale of mechanization of production, but from the ability that the factory system in its whole provided for greater control of the labour process. The discipline and the supervision that the factory ensured could lower the cost of the business, without necessarily being technological superior.